





PRESENT CONDITION ALONG A PART OF THE WATER FRONT OF THE DELAWARE RIVER TO BE OCCUPIED BY MUNICIPAL PIERS



PROPOSED MUNICIPAL PIERS ALONG THE DELAWARE RIVER

SOUTH PHILADELPHIA



THE ABOLISHMENT OF GRADE
CROSSINGS AND THE CREATION OF
OPPORTUNITIES FOR COMMERCIAL
AND INDUSTRIAL DEVELOPMENT

DEPARTMENT OF PUBLIC WORKS
PHILADELPHIA

1913



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part 1

HISTORY OF THE NEGOTIATIONS FOR THE ABOLISHMENT OF GRADE CROSSINGS IN SOUTH PHILADELPHIA

The abolishment of grade crossings upon the lines of the various railroads in South Philadelphia has been a subject of conference between the officials of the City and the railroad companies for many years. When the City undertook the revision of the lines and grades south of Snyder Avenue in 1898, an effort was made to reach an agreement with the Schuylkill River East Side Railroad Company and the Pennsylvania Railroad Company looking toward the readjustment of the lines of these companies in a manner that would provide for a separation of grades of the streets and railroads. Nothing was accomplished, however, at that time, except that the Pennsylvania Railroad Company agreed to conform its lines to the grades that the City might adopt, making all the streets cross at grade, with the understanding that the separation of grades by elevating or depressing would be a subject for future decision.

The matter then rested until about 1904, when the Bureau of Surveys prepared a plan which contemplated the elevation of the Washington Avenue Branch of the Philadelphia, Baltimore and Washington Railroad from the Schuylkill River to Broad Street, the elevation of the Delaware Extension of the Pennsylvania Railroad from the Arsenal bridge over the Schuylkill River to a point east of Broad Street, from which point an incline was proposed connecting the elevated line with the Greenwich Point Freight Yards and Shipping Terminals, also the elevation of the tracks of the Schuylkill River East Side Railroad between its crossing of the Schuylkill River and Twenty-fifth and Wolf Streets, where it was intended to connect it with the elevated line of the Delaware Extension of the Pennsylvania Railroad, carrying it immediately adjacent to the latter to a connection with the yards and tracks along the Delaware River front.

After a series of negotiations, extending over a period of several months without accomplishing any important results, the matter was again allowed to rest so far as active operations were concerned.

The Bureau of Surveys, however, continued its studies of the entire situation in South Philadelphia, and finally evolved a plan which affected every line of railroad passing through that district, contemplated the unification of the lines of the Schuylkill River East Side Railroad Company and the Pennsylvania Railroad Company, a reduction in the number of lines, the abolishment and removal of tracks upon various main lines and branches, the principal ones of which were the Delaware Extension of the Pennsylvania Railroad between Pollock and Packer Streets and from Twenty-fifth Street to Delaware Avenue, and the Schuylkill River East Side Railroad in Oregon Avenue from Twenty-fifth and Wolf Streets to Delaware Avenue.

The general intent of this study was to combine all of the through lines upon one right of way from a point at Twenty-fifth and Wolf Streets southward along Twenty-fifth Street, curving to the eastward near League Island and extending eastward immediately north of the boundary line of the Philadelphia Navy Yard to a point east of Broad Street, where it was proposed to establish a general terminal yard to take the place of the one now existing at Greenwich Point, which latter plant was to be removed to the new location further south. This would result in leaving that entire section of South Philadelphia lying between Twenty-fifth Street and Delaware Avenue clear of railroad tracks, and by the transfer of the yard and shipping terminals at Greenwich Point, would leave that part of the Delaware River front now occupied by the Greenwich Point piers open to development by the City as a water terminal for general commercial uses.

As a result of the study of the entire situation in South Philadelphia, the Bureau of Surveys became convinced that no plan for the abolishment of grade crossings would be ultimately economical or satisfactory that did not provide for a comprehensive treatment of the whole railroad problem under which the disposition of the railroads might be

permanently settled. To provide for the abolishment of one or two grade crossings or for the change of grade of one individual line of railroad would be only a temporary expedient, and the problem of the further abolishment of grade crossings would arise whenever a new street was to be opened.

The plan prepared was believed to provide a scheme for the relocation and readjustment of the railway lines in a manner that would permanently dispose of the entire problem of steam railroad operation throughout the section south of and including Washington Avenue. Copies of this general plan and of a form of ordinance to carry it into effect were submitted to the interested railroad companies in 1910, and shortly thereafter the Pennsylvania Railroad Company agreed to certain parts of the plan, namely—the elevation of the tracks in Washington Avenue as far east as Broad Street and the elevation of tracks in Twenty-fifth Street as far south as Moore Street. The Schuylkill River East Side Railroad Company indicated a willingness to enter into the project, but no conclusive agreement as to the combination of the various lines south of Twenty-fifth and Wolf Streets was reached.

The matter had remained in about this condition for a year or more prior to the present Administration. Shortly after Mayor Blankenburg came into office he was appealed to by the Southwestern Business Men's Association, the South Philadelphia Business Men's Association and various other trade and civic bodies in South Philadelphia to secure the long desired removal of the Baltimore and Ohio tracks from Oregon Avenue. Negotiations were immediately entered into with this railroad for this improvement. The principal argument in the hands of the Administration was a clause in the franchise for the Schuylkill River East Side Railroad which required it on demand to elevate its tracks over Broad Street. To do simply this and nothing more would have cost the Baltimore and Ohio Railroad Company \$500,000. To elevate the entire line on Oregon Avenue, and thus remove all grade crossings, would have cost \$750,000. The City did not want the Baltimore and Ohio Railroad to remain in Oregon Avenue and it is probable that the railroad company itself did not want to remain there. It was, therefore, suggested

that on account of the removal of grade crossings on Oregon Avenue, the City might be interested in assisting to secure a right of way farther south. Plans were made looking toward the Baltimore and Ohio Railroad paralleling the Pennsylvania just north of Packer Avenue. There were decided operating difficulties connected with this plan. Negotiations were then opened up with the Pennsylvania Railroad for the handling of the Baltimore and Ohio traffic on the present lines of the Delaware Extension. A traffic agreement was drawn up, but this was so unsatisfactory to the Baltimore and Ohio that negotiations with both railroads were carried on looking toward the building of a joint line across the City at about the present location of the Delaware Extension. These plans had not been gone into very far before both the railroads and the City were forced to the conclusion that this plan did not offer the comprehensive solution which the best development of this section, and especially of our port facilities, demanded. At this point ended the first stage in the present series of negotiations.

In the early fall there began a series of engineering conferences, participated in by the engineering representatives of the City, Baltimore and Ohio, and Pennsylvania Railroads, and the general officers of the Philadelphia Belt Line Company. These conferences were held under the instructions of the executives of the several interested parties. Their object was to remove the obvious engineering objections which had been made to the Belt Line proposition as drafted years before in the Bureau of Surveys. This project had provided for a Belt Line along Government Avenue, running at right angles with Broad Street and crossing that thoroughfare on an elevated structure, one section of which was to be treated as a monumental gateway to League Island Navy Yard. On this proposed road the tracks would reach grade at about Seventh Street, and this made impossible a yard of sufficient length to handle the theoretically correct length of train. Fortunately, Olmstead Brothers had been retained to make a restudy of the plans for League Island Park. They felt that the plan for a marginal elevated freight line, cutting off the view of the Navy Yard and river from the Park, made almost hopeless the development of this

Park into anything that would prove satisfactory, so that they entered with enthusiasm upon a study of how this freight line could be carried under Broad Street. Carrying the Belt Line farther north than had originally been planned, and then allowing it to pass under Broad Street, gave the length of yard to the East of Broad Street that the railroad felt was necessary. Another difficulty that had stood in the way of this development had been the feeling on the part of the railroads that wharf property developed immediately to the north of League Island Park would not be as desirable as that they were being asked to vacate farther north. Some studies were made which indicated that docks at this point will not be any more likely to fill than those farther up the river.

Again, comprehensive studies had been made as to the way in which this line was to be carried through the plant of the Atlantic Refining Company, without doing undue damage to that plant, and without involving the parties at interest in undue damage costs.

These and other engineering difficulties were finally removed. The plan as developed was turned over early in the year to the executive officers of the railroads, and the series of conferences begun in the Mayor's office, which have now been consummated.

STATEMENT BY THE MAYOR, IN REFERENCE TO THE CONTEMPLATED IMPROVEMENTS

The many conferences between officials of the city, the railroads and the Philadelphia Belt Line Company have brought most gratifying results. The fine spirit of co-operation; the desire to arrive at an amicable, mutually advantageous settlement by all the parties interested, have led to an agreement that promises much for Philadelphia.

Our metropolitan development has been long neglected and delayed owing largely to procrastination, misunderstanding and antagonism. These have at last been overcome and, with cordial popular support, I predict a more rapid advance for our city than at any time in its history. It is not only the abolition of grade crossings in South Philadelphia, a question that has engrossed the attention of the authorities for the last twenty-five years, but also the far-reaching measures proposed to utilize our splendid river front to the fullest advantage and thus to make Philadelphia in the near future one of the world's greatest ports. With city railroads and Belt Line, with modern docks and wharves, and with all manufacturing and shipping interests acting as a unit, Philadelphia may soon be made as great a factor in the world's trade as are other inland ports, such as London, Hamburg or Antwerp.

Public interest has naturally been directed to the provisions in the agreement for the protection of the rights of the Belt Line Railroad Company and the preservation of its opportunities for future development. The agreement provides for both these things without a possibility of doubt. The Belt Line is first protected in all its present rights and franchises and in all its existing agreements with other railroads. It is given the express right to lay two tracks on Delaware Avenue from Queen Street to Hoyt Street, and it is given, in fee, a right of way from Delaware Avenue and Hoyt Street west and north to Twenty-ninth Street and Magazine Lane. It is also provided that the four tracks owned by the Pennsylvania and Baltimore Companies shall be operated as a Belt Line, or "open gateway," with free access insured to any other company desiring to enter the City

and use these tracks. There are express covenants that the operation of the road shall be on equal terms to all users without favoritism or discrimination.

It is further provided that the right of use may be given to another company by either of the owning companies or by the Belt Line.

In the unlikely event of any refusal in the future by the railroad companies to live up to this agreement, it is provided that the agreement shall be enforceable by the decree of a court of equity. Over all will be the supervisory powers of the Inter-state Commerce Commission and the new Public Utilities Commission to be appointed by the Governor. Finally, if all these precautions should fail, two tracks may be laid on the right of way of the Belt Line.

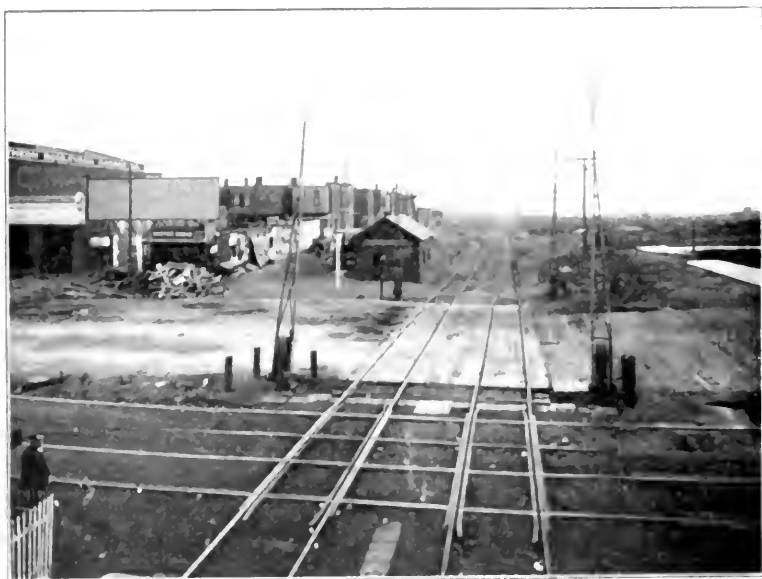
The terms of use by another company desiring to enter the city are made unusually liberal. It is provided that the road shall be divided into two sections, one section including the comparatively inexpensive stretch on Delaware Avenue and the other the more expensive construction west to Girard Point and north to Passyunk Avenue. Any other railroad company may use either or both of these sections, and if it uses only one section, it is not obliged to pay, as rental, interest upon any part of the cost of construction of the other section. Neither is it obliged to repay any part of the cost of the other section. Instead of being obliged to contribute a large sum of money at once, it will only be called upon to pay interest on a part of the cost of construction and of the net value of the abandoned lines for which the new road will be a substitute. This "net value" will be a comparatively small sum and only enters into the matter in so far as it affects another company. No portion of this value is contributed directly or indirectly by the City.

Aside from all other benefits, a large area of land south of Oregon Avenue, 4,000 acres or more, will be sought for building purposes, homes as well as manufacturing plants. Miles of improved water front on the Delaware and the Schuylkill and enlarged shipping facilities by land and water will be an incentive to establish new industries and thus secure new fields of labor and employment for our ever-growing population.

Another point in this development of South Philadelphia is not generally appreciated, and that is the financial result for the City. The Thirty-ninth Ward, south of Mifflin and east of Broad Street, comprising 4.809 square miles, has been retarded in progress for many years. The value of 3,500 acres of land, now assessed at an average of \$1,507 an acre, or a total of \$5,318,000, should increase with the developments contemplated in such proportion as to shortly reach the assessment in other wards with a river front. The First, Second and Third Wards, with 1.333 square miles, yield to the City, with an assessment of \$46,582,400, at one per cent. tax rate, \$465,824; the Eleventh, Twelfth and Thirteenth Wards, containing but 0.662 square miles, on an assessment of \$32,363,941, contribute to the City Treasury \$323,639.41; the Sixteenth, Seventeenth and Eighteenth Wards, 1.182 square miles, assessed at \$33,880,595, pay a yearly toll of \$338,805.95. Or, to summarize: The Thirty-ninth Ward, containing 4.809 square miles, assessed at \$20,585,988, contributes to the City the meagre sum of \$205,859.88, while the nine wards enumerated above, containing together only 3.177 square miles, with a total assessment of \$112,826,936, annually contribute \$1,128,269.36.

The Thirty-ninth Ward is as near to the City Hall as is the Eighteenth, and with a Broad Street subway now within sight, it will be fully as accessible to the heart of the City as are the northeastern wards named. At the same time, the river front in the Thirty-ninth Ward is as extensive as that of all the wards mentioned. It is reasonable, therefore, to suppose that the average real estate value, per acre, in the Thirty-ninth Ward will, at no distant day, approximate that of the other river wards spoken of. With such increased revenue from real estate taxes, the City will be much more than compensated for any outlay in abolishing grade crossings, for developing the harbor and for building modern docks and wharves.

The immeasurable additional advantage of creating new fields of labor by opening large tracts of land as sites for the building of mills and factories should not be overlooked. The City should certainly be congratulated on the solution of one of the serious questions that have perplexed us for many years.



GRADE CROSSING OF THE SCHUYLKILL RIVER EAST SIDE RAILROAD AT
BROAD STREET AND OREGON AVENUE. VIEW EAST



GRADE CROSSING OF THE SCHUYLKILL RIVER EAST SIDE RAILROAD AT
TWENTY-THIRD STREET AND PASSYUNK AVENUE. VIEW NORTHEAST



THE SCHUYLKILL RIVER EAST SIDE RAILROAD. VIEW NORTHEAST FROM
TENTH STREET AND OREGON AVENUE



OREGON AVENUE WEST FROM FIFTEENTH STREET. THE PRESENCE OF THE
RAILROAD TRACKS PREVENTS THE EXTENSION OF IMPROVEMENTS

THE ACQUISITION OF RAILROAD PROPERTY FOR MUNICIPAL PIERS

The acquisition by the City of the properties of the Baltimore and Ohio Railroad Company, at the foot of Snyder Avenue, and of the Pennsylvania Railroad Company, between Bigler and Hoyt Streets, on the Delaware River, is one of the most valuable features of the South Philadelphia agreement. Its importance to the development of the port can hardly be over-estimated.

The tract belonging to the Baltimore and Ohio Railroad comprises the site of the old Pier No. 80—which was destroyed by fire about a year ago and has not yet been rebuilt—and two or three smaller structures adjacent, the total length of river frontage being about 900 feet. The Pennsylvania Railroad property, known as the Greenwich Coal Terminals, takes in practically all of the present railroad pier developments in the Greenwich section—except the lowermost wharf known as Point House Pier—and has a total river frontage of about 2,500 feet, the two properties together having a combined bulkhead length of 3,400 feet.

The section lying between them is either in a totally undeveloped condition, or—in the case of the three manufacturing establishments already located there—developed in such a way that the entire water front from Snyder Avenue to Hoyt Street, a distance of about 7,200 feet—nearly one and one-half miles—would be easy of acquisition by the City and would afford an opportunity for a symmetrical, economical and efficient steamship terminal development unapproached at any port on the Atlantic Coast.

Immediately in front of these properties at the heads of the piers proposed to be built on them is the main Delaware River Channel, 35 feet deep and 1,000 feet wide, now under improvement by the U. S. Government, and in the rear of it the tracks of the Belt Line Railroad, affording direct access to and from the piers to three of the great trunk line systems of the country. These properties are fortunately of sufficient depth to permit of the construction of the long and

wide piers which are now requisite for the proper handling of the enormous cargoes carried by modern ocean freighters, and the necessary car storage yards immediately in front of them for handling the large number of cars required for the prompt dispatch of cargo to and from the steamers at the wharves.

This site has been looked upon by the Department of Wharves for a long time as the logical location for the concentration of port improvements in this City for some years to come, and the consummation of the long-drawn-out negotiations with the railroads removes the principal obstacle in the way of what it is believed can and will be made into the finest, completest, and most noteworthy single terminal development on this side of the Atlantic.

Bearing in mind the fact that the modern steamship terminal is not merely an aggregation of an indefinite number of piers, but must provide, in a logical scheme, for the effective co-ordination of the various units necessary to make it a complete working entity, the Dock Department has prepared preliminary plans for the construction of a dozen or more piers in this section, each 1,200 feet long by 300 feet wide, with docks between them of the same width as the piers, and with railroad yards located in the rear between the ends of the piers and Delaware Avenue. Storage warehouses for commodities of every kind received from the ships and held for local consumption or shipment into the interior, or vice versa, and a factory section somewhat along the lines of the great Bush Terminal in Brooklyn, are planned to be located on the westerly side of Delaware Avenue. It is regarded as a practical certainty that the construction of these proposed piers would be followed by the location convenient to them of many manufacturing establishments which use large quantities of imported raw materials, and with them would come the concurrent residential upbuilding of the section in the rear of the factories.

These preliminary plans contemplate piers and mechanical equipment of the most advanced type of construction, and the building of the first of them will mark a long step in advance of anything yet attempted in this line in Philadelphia or any other American port. It is recognized that

this is not the work of a few months, or even two or three years, but the commencement of this great work is looked for in the near future and all necessary preparations are being made by the engineers of the Department with that end in view. A perspective drawing of a portion of this proposed terminal is shown as a frontispiece, the piers in the foreground, with the railroad tracks, trestles, and car yards beyond them; then still further back, on the west side of Delaware Avenue, the warehouse and factory section of the development—the whole illustration giving a faint idea of the tremendous scope of the activities of a properly planned modern steamship and railroad terminal. Accompanying this drawing is a photograph showing the present undeveloped condition of a portion of the site.

REVISION OF THE STREET SYSTEM FOR THE DEVELOPMENT OF PROPERTY

"In connection with the re-adjustment of the steam railroad lines in South Philadelphia, a revision of the lines and grades of streets is contemplated throughout the unimproved area lying between the Delaware and Schuylkill Rivers in a manner that will provide better opportunities for transportation through that area and also for a better development of the territory for commercial, industrial and residential purposes. At the present time the street system is laid out rectangularly with very few diagonals, the blocks being from 360 to 400 feet square, with main streets usually 60 feet in width. The usual method of developing these blocks for residential purposes is to open two 40-foot wide streets through each block, which results in building lots in many instances less than 50 feet in depth, a depth that is not sufficient for ordinary domestic purposes and necessarily drives the children into the street to play or denies them any opportunity to get out in the open air. The present layout does not lend itself to the best forms of sub-division of the property for purposes of general development, and a system can be established that will better serve the needs of future industrial, commercial and residential growth. **It will be essential to the proper development of industrial and commercial improvement that better facilities shall be provided for reaching the proposed new docks and railroad terminals than are provided by the present plan.** Traffic to and from that portion of Delaware Avenue which has been widened and improved north of Christian Street is put to very great inconvenience by the lack of suitable approaches, the streets now entering that section of the avenue from the City being narrow, as a rule, and having heavy grades descending to the water front. This condition has been a source of much complaint from all traffic interests using the approaches, and wider and more direct approaches from the City should be established to the new harbor improvements along the Delaware and Schuylkill River south of Christian Street.

"Following the reconstruction of the railroads to the new lines and the removal of the present surface tracks and the construction of the proposed docks, the industrial development of that section should proceed rapidly, and, in order that proper facilities for traffic movement may be established, it will be necessary to create better and more direct connections between commercial and industrial areas and the City; this will require wider streets and a greater number of diagonals than are provided by the existing plans.

"The opening up of this section to commercial and industrial activities will naturally be followed by the building up of considerable areas with homes for the people who will be engaged in the various industries, and **opportunities should be given for a more liberal and more attractive development for the homes of those workers than it has been customary to provide in some sections of the City.** The present system of streets in the southern section of the City has encouraged the laying out of very small lots, so that the people living in the small row houses do not have the opportunity they should for the enjoyment of open spaces, sunlight, air and those natural surroundings which would add greatly to the healthfulness and attractiveness of residential sections occupied by the working classes.

"The street system throughout this section should also be laid out with a view of setting aside areas at proper distances apart for the establishment of **small parks and playgrounds**; such places will be absolutely essential for the use of the community if the best interests of the people are to be considered and proper provision made for the physical training and health of the children. Certain wide streets should also be planned as parkway connections with League Island Park and with the general park system of the City.

"The one-family house which is characteristic of Philadelphia is held by many city planning and housing experts to be the most desirable type of the workingman's home, but the tendency of real estate operators has been toward getting the largest number of lots out of the land in developing it, and opportunity should be given for subdivision into larger plots in order that each house may have more open space attached to it than is usually the case under the present practice.

“The general revision of streets in the undeveloped territory with these objects in view will be to the advantage of everyone who will be concerned in the growth of improvements in the southern section of the city. **The general development of the commercial and industrial enterprises which will naturally be attracted to localities that are well served by railway and water-routes of travel should be accompanied by the best facilities for the free movement of street traffic and by the opportunity for the creation of an ideal residential section and workingmen’s colony.**”

SUMMARY

**Preliminary Estimate of Cost
of Re-locating and Elevating Tracks and Freight Terminals
of Pennsylvania Railroad Company, Philadelphia, Baltimore & Washington Railroad Company
and the Baltimore and Ohio Railroad Company
in South Philadelphia**

Items	Total Estimated Cost	Pennsylvania Companies' Portion	B. & O. R. R. Co.'s Portion	City of Philadelphia's Portion
Washington Avenue Branch, P., B. & W. R. R.				
Washington Avenue Elevated Railroad				
30th St. and Gray's Ferry Avenue to West Side of Broad St. (2 tracks, 30th St. to 25th St., 3 tracks, 25th St. to 17th St., and 2 tracks, 17th St. to Broad St.)	\$1,950,000	1-2 cost \$ 975,000		1-2 cost \$ 975,000
West side of Broad St. to 5th St. (2 tracks)	1,000,000	1-2 cost 500,000		1-2 cost 500,000
New Freight Station and Elevated Yard Tracks between Broad St. and 17th St.	1,384,000	1-2 cost 692,000		1-2 cost 692,000
Car Storage Yard south of Washington Ave., between 18th and 19th Sts.	532,000	1-2 cost 266,000		1-2 cost 266,000
Total cost to P., B. & W. R. R. Co.		\$2,433,000		
Delaware Extension, P. R. R.				
Two-track Elevated Railroad steel viaduct on 25th St., from Arsenal Bridge to McKean St., thence along Point Breeze Ave. to 29th St., thence embankment to Passyunk Ave.	\$1,586,000	1-2 cost \$ 793,000		1-2 cost \$ 793,000
Three Yard Tracks from Magazine Lane to Penrose Ave. to replace tracks on Girard Point Branch	260,000	1-2 cost 130,000		1-2 cost 130,000
Girard Point Storage Co.'s Tracks and Elevation to connect with Joint Line	364,000	1-2 cost 182,000		1-2 cost 182,000
Two Tracks on Delaware Ave. from Bigler St. to Swanson St. to be relaid with girder rails, paving Delaware Ave. from Reed St. to Queen St., purchasing Reed St. property and rebuilding yards and tracks to compensate for tracks removed from Delaware Ave., and to permit widening of Reed St., Front St. and Washington Ave.	734,000	1-2 cost 367,000		1-2 cost 367,000
Additional Yard Facilities required by P. R. R. Co., Reed St. and Washington Ave.	273,000	Entire cost 273,000		
New Terminal Yards between Broad St. and Delaware Ave., not including pier development:				
Portion to be paid jointly by City and P. R. R. Co. to replace present facilities and provide for dredging	1,500,000	1-2 cost 750,000		1-2 cost 750,000
Additional facilities to be constructed entirely at P. R. R. Co.'s expense	2,000,000	Entire cost 2,000,000		
Purchase by City of Section No. 1—Piers, Tracks, etc., Delaware Ave. to Pierhead Line and Bigler St. to Hoyt St. (approximate estimate)	2,300,000			Entire cost 2,300,000
To replace above waterfront facilities on property now owned by P. R. R. Co., south of Hoyt St.	1,300,000	Entire cost 1,300,000		
Joint Four-Track Line, 29th St. and Passyunk Ave., to Bigler St.				
Four-track Elevated Railroad, 29th St. and Passyunk Ave. to Magazine Lane, thence embankment to Broad St., including Broad St. Bridge and approaches	3,200,000	3-10 cost 960,000	3-10 cost 960,000	2-5 cost 1,280,000
Four tracks at grade from east side of Broad St. to Bigler St. and Delaware Ave.	444,000	3-10 cost 139,800	3-10 cost 139,800	2-5 cost 186,400
Connecting Atlantic Refining Co.'s and City's Point Breeze Gas Works' sidings and tracks to elevated joint line	100,000	3-10 cost 30,000	3-10 cost 30,000	2-5 cost 40,000
Total cost to P. R. R. Co.		\$6,924,800		
Baltimore and Ohio Railroad				
Two-track Railroad on embankment from Vane Ave. to Passyunk Ave.	475,000		1-2 cost 237,500	1-2 cost 237,500
Two tracks on Delaware Ave., from Bigler St. to Vandalia St.	75,000		1-2 cost 37,500	1-2 cost 37,500
New Terminal Yards between Broad St. and the Delaware River (approximate estimate)	1,500,000		Entire cost 1,500,000	
Purchase by City of piers, tracks, etc., Delaware Ave. to Pierhead Line and McKean to Jackson Sts. (approximate estimate)	1,000,000			Entire cost 1,000,000
Total cost to B. & O. R. R. Co.			\$2,904,800	
Total cost to Pennsylvania Companies				\$9,357,800
Credit: City's purchase of present waterfront property and facilities of Pennsylvania Companies				2,300,000
Net total cost to Pennsylvania Companies				\$7,057,800
Total cost to Baltimore Companies				\$2,904,800
Credit: City's purchase of present waterfront property and facilities of Baltimore Companies				1,000,000
Net total cost to Baltimore Companies				\$1,904,800
Total cost to City of Philadelphia, including \$60,000 on account of Philadelphia Belt Line Railroad right-of-way				\$9,796,400
Credit: Value of waterfront property and facilities purchased from the Pennsylvania Companies and the Baltimore Companies				3,300,000
Net total cost to the City of Philadelphia for work of construction				\$6,496,400
Net total cost of the entire work				\$18,758,200

Note: This estimate is approximate and was made partly by the Railroad Companies and partly by the Bureau of Surveys. It is subject to change after more complete surveys and the development of the plans.

EDITORIAL COMMENTS OF THE PRESS

ABOLITION OF GRADE CROSSINGS IN SOUTH PHILADELPHIA \$18,000,000 TO BE EXPENDED

Public Ledger, July 8, 1913.

The announcement that an agreement has been reached between the executives of the city and of the interested railroad companies, covering the abolition of grade crossings and the relocation of tracks in the southern part of the city, is of greater local interest and importance than any other announcement in the lifetime of the present generation. It is doubly gratifying to know that the agreement is in such shape that it will probably command unanimous approval. The difficulties that lay in the way of reaching such an agreement are obvious. The railroad companies were seeking no additional franchises or privileges, nor was the city in a position to enforce any drastic measures. There were no expired or expiring franchises. There were grade crossings which the city might have attacked in the exercise of its general police power, but as the City Solicitor wisely advised Councils, this was a tedious way of reaching a result, involving years of altercation, recrimination and litigation. He suggested that the proper way was to take the matter up in conference and reach a fair and equitable agreement. That is the way in which the abolition of grade crossings has always been handled in Philadelphia, and the results already attained under previous agreements, and to be attained under this agreement, fully justify its wisdom. It was in recognition of this principle that the Legislature passed the act 15 or 20 years ago authorizing an apportionment of the cost of such operations between the city and the companies involved.

The only concrete fact which the city had to build upon was the right to compel the Baltimore and Ohio Railroad Company to make an overhead crossing of Broad Street at the joint expense of the company and of the City. From this starting point the municipal authorities succeeded in

convincing the Baltimore and Ohio Company that if its crossing of Broad Street was to be elevated, its entire Oregon Avenue line would have to be elevated; that this would be an unsatisfactory solution both for the company and for the City; that the agitation now directed against the Baltimore and Ohio would within a very few years be directed against the Pennsylvania tracks a few blocks south, and that the proper solution would be to abandon both these lines and substitute for them a line girdling the southern portion of the City from Twenty-fifth Street and Passyunk Avenue to Delaware Avenue and Queen Street.

Then came the relation of the Philadelphia Belt Line Railroad Company to the enterprise. The ideal solution would have been for either the City or the Belt Line Company to build the new track, but in the way of this solution stood very serious if not insuperable legal, financial and operating difficulties. The attitude of the representatives of the City has been from the first that the new line must be a Belt Line in substance and fact, in whatever company or companies the legal title to it might be vested. Appreciating the self-sacrificing interest which had been shown by the public-spirited citizens who had organized the Belt Line and kept it alive for more than 20 years, they insisted that both its present rights and its capacity for future development must be preserved. These things are accomplished by the agreement.

As the Mayor points out, the Belt Line is protected both in its municipal franchises and in its existing agreements with other railroads. It is given the right to extend its tracks down the whole length of Delaware Avenue to Hoyt Street, where the new railroad yards will be located, and west of that point it is vested with a right-of-way paralleling the tracks of the other companies. It is covenanted and agreed that the four tracks of the other companies shall be open to any other company now or hereafter entering the City on what is called "equal" terms, but which are really preferential terms, in at least two respects.

The Pennsylvania and the Baltimore and Ohio make an investment of over \$12,000,000, and must carry this investment for a considerable period of time, during which it can-

not be productive of adequate revenue. A new company can come in either at once or after the location of industries and the construction of municipal wharves have made the line a great traffic producer. The new company can then come in without refunding any portion of the investment of the other companies, merely paying its share of operating expenses and a rental representing interest on one-third of the cost. The new company will further have the invaluable privilege of having the line divided into two parts, and using either or both of these parts. The great advantage of this arrangement lies in the fact that the section on Delaware Avenue will be for many years, if not always, the most valuable section from a traffic standpoint, although it is a section where, owing to the fact that there is no right-of-way to be bought and little or no grading to be done, the construction cost will be extremely low, making the rental of that section correspondingly low. This is an arrangement which probably would never be made in any mere bargain between two railroad companies, and it is a tribute alike to the insistence of the City officials and the broad spirit in which the railroad officials have approached the proposition, that this arrangement is provided.

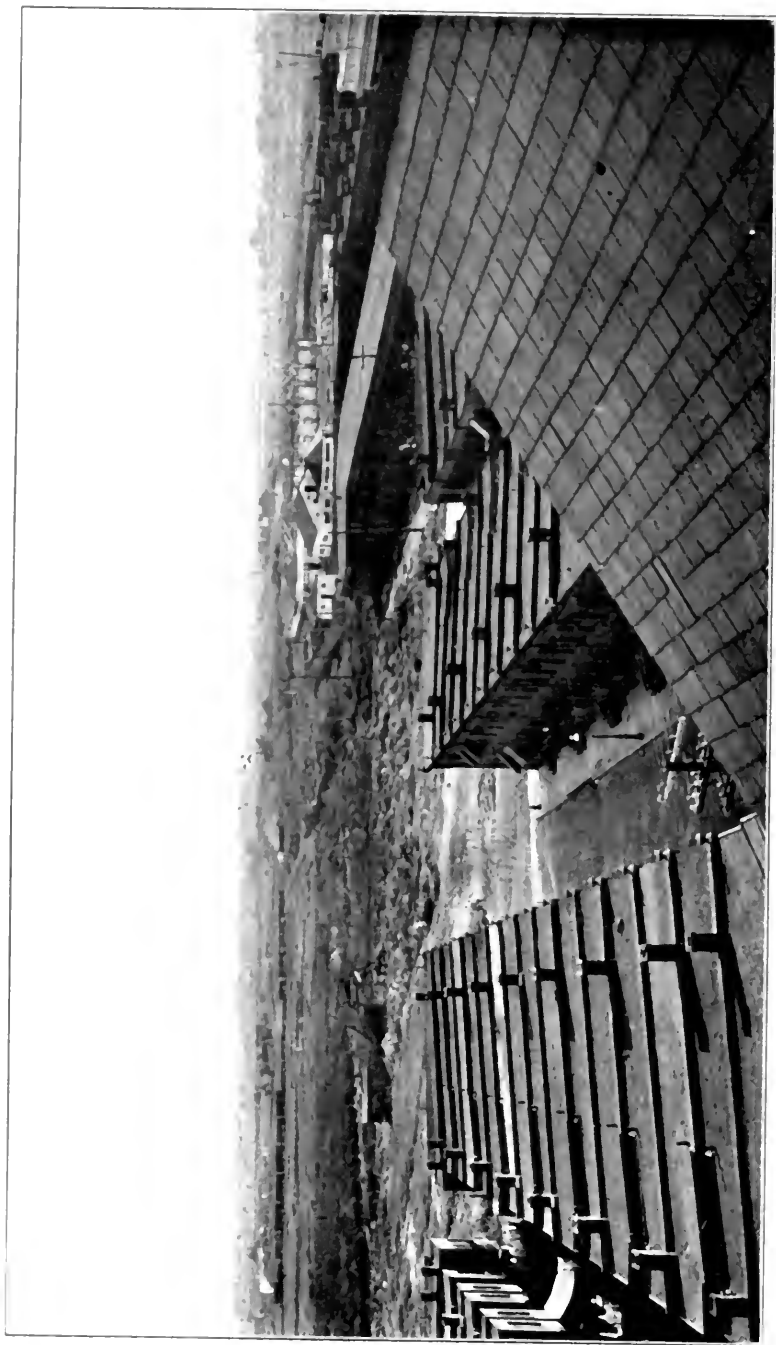
An examination of the agreement shows that the provisions for the maintenance of the new road as an "open gateway" are of the most positive and specific character; that legal precautions are taken to make these provisions enforceable by the specific decree of a Court of Equity, while if all of these precautions should fail, the possibility of monopolization is effectually precluded by the grant of a right-of-way to the Belt Line.

The benefits of the agreement are far-reaching. The elevation of the Washington Avenue line and of the lines on Twenty-fifth and Twenty-ninth Streets, and the abandonment of the lines on Oregon Avenue and immediately south of that street, will do away with interruption to traffic and peril to life and limb, and will open up for residential occupancy thousands of acres of land in South Philadelphia within four or five miles of the City Hall, which have been cut off for a generation. These, however, are the least of the advantages.

The agreement provides for the sale to the City of nearly three-fourths of a mile of Delaware River frontage, contiguous to undeveloped lands, on which the City can construct the best designed and most comprehensive system of port improvements on the Atlantic coast. In return for the vacation of Washington Avenue east of Delaware Avenue, and of a few unopened streets in the southwestern part of the City, the railroad companies dedicate to the City all land and buildings owned or controlled by them which will be needed for the opening of the widened Delaware Avenue south of Christian Street. This will enormously reduce the damages incident to such opening, and with comparatively slight additions to the fund of \$250,000 provided in the last loan for that purpose, the opening of this great marginal thoroughfare can now proceed rapidly. By the single operation of dredging from the Delaware River to fill in the site of the railroad yards between Greenwich Point and League Island, the Horse Shoe Shoal will be removed, and hundreds of acres of mosquito-breeding and disease-producing swamps will be reclaimed. A great Belt Line will be constructed, serving all the public and private wharves on the Delaware River, and on the inner side of the circle there will be immediately available desirable sites for industrial establishments capable of giving employment to many thousands.

Back again from these industrial establishments will be a great residential area. The development of these industrial sites and residential area will add millions to the assessed value of the wards affected, and thus yield to the City an annual revenue in taxation which will repay it many fold for its contribution to this monumental work. At a time when the shadow of possible industrial depression hangs over us, the inauguration of an operation which involves the expenditure right in our own City of over \$18,000,000 is perhaps not the least of the advantages.

In a population of more than a million and a half of people there must necessarily be some whose narrow vision or desire to make personal or political capital causes them to criticise. It is quite possible that, in spite of the time that has been spent on this agreement, and the manifest care with which it has been drawn, still further improvement may be possible, but the Public Ledger extends its hearty



GENERAL VIEW OF UNTIMBERED TRESTLE ALONG BROAD STREET SOUTH OF ORIGIN AVENUE
PHILADELPHIA NAVY YARD IN THE DISTANCE



THE PREVAILING TYPE OF STREET AND ONE FAMILY HOUSES. VIEW NORTH
ON SIXTEENTH STREET FROM OREGON AVENUE



A NEW TYPE OF STREET AND ONE FAMILY HOUSES. THE GIRARD ESTATE
IMPROVEMENTS. COLORADO STREET NORTH FROM SHUNK STREET

congratulations to all those who have co-operated in bringing this splendid plan to its present stage, and believes that intelligent public sentiment, while welcoming useful and constructive suggestions, will have little tolerance for those who may be disposed to merely criticise from unworthy motives. It will now be in order for every commercial organization and every association of business men or of citizens of any trade, class or profession, who have the interests of Philadelphia at heart, to study this agreement carefully, and then express themselves in no uncertain tones.

A GREAT PORT PROMISED

The Philadelphia Inquirer, July 9, 1913.

The great, the important feature of the agreement which the City, the railways and the Belt Line, through their respective officials, have reached is the brilliant promise that at last the way is opening for Philadelphia to become a port of magnitude. The removal of all grade crossings in South Philadelphia means the development of much territory now practically unoccupied. But, after all, these removals were bound to come in any event in the course of time. That time is hastened by the port-building that is contemplated, which is the vital thing.

The opportunities confronting Philadelphia have been fully realized for many a long year. City administrations have talked. Councils have talked. Everybody has talked, but nothing has been actually accomplished beyond the construction of one or two piers. Down the river as far as League Island the possibilities for expansion have been invitingly exposed to view. But the City has lacked money—has lacked a unity of purpose as well. It is no longer difficult to see where the money is coming from, whereas the agreement clears away all obstacles save the actual financing of the vast proposition.

That is to say, all obstacles are cleared away if Councils shall agree to the plans, for they have the final say. Naturally, then, the rather intricate articles of the agreement will receive a great deal of study from them, while the various business associations of the City will discuss and criticise or approve. After a day's careful consideration of the plans and of the agreement, The Inquirer finds

very little to criticise, very much to applaud. Indeed, when the difficulties which confronted the Mayor and his advisers are taken into consideration—difficulties which few citizens can possibly understand, considering that they could not be conversant with the serious questions that have been settled only after numerous conferences—when these difficulties are taken into consideration, The Inquirer is of the opinion that the City's representatives have deserved the cordial support of the public, and that support this journal unhesitatingly gives. It may be that some Councilmen can pick a flaw here and there, but we doubt it. The work of the conferees has been done splendidly. No matter has been overlooked, so far as we can discover. Indeed, we do not see how it would have been possible to safeguard the City's interests more thoroughly, and our advice to Councils is to co-operate heartily in carrying out the agreement.

For what is it that the administration has in view? Leaving aside the removal of grade crossings which is provided for, there is contemplated on the Delaware front a collection of wharves that probably cannot be duplicated elsewhere. Philadelphians who are familiar with the water front will readily recall the nest of coaling piers known as the Greenwich Piers, stretching between Bigler and Hoyt streets, a distance of 2,500 feet. This property the City is to acquire from the Pennsylvania Railroad. Further up the stream, between McKean and Snyder Avenue, is a 900-foot stretch belonging to the Baltimore and Ohio, which the City will also buy. Between these two railroad holdings is a considerable territory only partially developed, which the City can acquire under the right of eminent domain. Counting this in, the City can take over something like 7,200 feet, or nearly a mile and a half. There is room here for sixteen to twenty wharves. The Department of Wharves already has plans drawn for twelve piers 1,200 feet in length. There will be ample room for trackage, for freight terminals and storage warehouses and for manufacturing plants to cluster along this vast improvement.

To make way for these City developments—for the construction of the magnificent city-owned terminals—the Pennsylvania and Baltimore and Ohio Railroads will move down the river to the extreme end of South Philadelphia,

adjoining League Island. There they will have their own coaling piers and their own freight yards. Without any qualification whatever, we believe this arrangement to be an ideal one.

But what are wharves without connecting railroads? And it was over this problem that the representatives of the City and of the railroads, including those of the Belt Line, had many a hard day's work. Had the Belt Line been in a position to construct the necessary trackage, there would have been no problem at all. But it wasn't. How, then, were its rights to be maintained and the tracks laid down by other corporations? For the Belt Line represents a great principle—that of the open door to all railway lines of the future and the guarantee of strict impartiality.

Briefly stated, here is the plan that has been adopted: All existing grade crossings to be abolished; a four-track line, to be owned by the Pennsylvania and the Baltimore and Ohio, to skirt League Island across to the Delaware and to follow up the Delaware, tapping every wharf, public and private, to Queen Street, from which point Delaware Avenue will be served by existing lines. But—and here is the point—the Pennsylvania and Baltimore and Ohio contract to open their lines to any railroad that seeks entrance, and, as a precautionary measure, the Belt Line may parallel the four-track line at any time. Thus will shipping receive equal treatment, thus will the open door be kept constantly open.

All this is going to cost money—much money—of course. The removal of grade crossings, the abandonment of existing rails, the construction of the four-track line, which is for all practical purposes a true belt line, will require an expenditure of about \$19,000,000. Of this sum the City will shoulder nearly \$9,800,000, but it will gain the river front property of the Pennsylvania and Baltimore and Ohio valued at \$3,300,000.

It has been the pleasure of the Inquirer always to lead in every movement for municipal development. It has known no politics in this connection. It has fought for progress and it has welcomed aid from any and every quarter. It has made no particle of difference to us whether it was a Reyburn or a Blankenburg who was commanding the forces

of progress at the City Hall. This journal has asked and demanded only that something practical should be done.

Well, something is being done right now, and it extends its most hearty congratulations to Mayor Blankenburg and to those of his directors who have been so tirelessly laboring to produce results.

It is a grand agreement that has been reached. There is needed but the sanction of Councils to place it in operation. That sanction we urge Councils to give.

After that—let's get to work!

PHILADELPHIA AS A PORT

The Philadelphia Inquirer, July 13, 1913.

Should Councils indorse the agreement entered into between Mayor Blankenburg, Directors Norris and Cooke, the officials of the Pennsylvania and Baltimore and Ohio Railroads and those of the Belt Line—a unanimous agreement, by the way—a great section of South Philadelphia will be revolutionized.

The removal of all the grade crossings will be no small improvement in itself, for much unoccupied territory will be opened to building operations. But it is over on the Delaware River front that the most important work will be undertaken. Here a vast port is to be manufactured—actually manufactured. Wharves are to be constructed, railway terminals built, warehouses for storage purposes erected, while in close touch with railroad and wharf there should spring up various manufacturing plants.

The Inquirer is exceedingly happy over the promised development. It has for years called attention to the immense possibilities for extending commerce. As a City we have been exceedingly neglectful of these opportunities. A great amount of space has been going to waste. For the broad acres that the city can purchase at a comparatively small expense, New York would be willing to pay millions upon millions. New York's harbor space is limited and congested. What is more, the piers of Manhattan are without railroad connection, hence there is no transfer from ship to railway car. True, private enterprise in Brooklyn has un-

dertaken to make a certain connection, but it is an expensive enterprise. In Philadelphia wharves and terminals can be created at much less cost and, when finished, can handle freight much cheaper than elsewhere, save, possibly, in Boston, where there is a plan for a considerable wharf development.

The natural facilities which Philadelphia enjoys are unrivaled. This means very much, for if we can demonstrate that ocean freight can be taken care of more expeditiously and with greater economy than elsewhere, we can invite steamship lines to take advantage of the opportunities to save money, and they will not be slow in showing their appreciation of municipal enterprise.

This argument we have advanced time and time again. It has never been disputed. It could not be. But the months have dragged into years and little has been accomplished in a practical way. But at last the clouds are breaking and the clear light of day is shining through the rifts. The great task of bringing the City and the railway lines into an agreement under which city-owned wharves can be served by a genuine belt line extending along the water front has been accomplished within the week. There is needed now only the indorsement of Councils, together with the finding of a few millions of dollars to inaugurate a vast enterprise that cannot fail to make of Philadelphia a port second only to New York in magnitude and importance.

A GREAT PORT—BUT NOT AT ONCE

The Philadelphia Inquirer, July 14, 1913.

Should Councils indorse the agreement entered into between the City administration and the officials of the railroads regarding the removal of grade crossings in South Philadelphia and the development of the Delaware River front, a great port will be a certainty—but not all at once. Time will be required to carry out the plans—time and money. But a beginning can be made almost immediately.

The proposition is to remove the Greenwich coal piers of the Pennsylvania Railroad and the wharves of the Baltimore and Ohio located just above them to the extremity of South Philadelphia, adjoining League Island, the aban-

doned territory to be developed by the City. But the future site of the railway wharves is now largely under water. It will be necessary to construct a bulkhead near the line of the channel and fill in the shoals with material dredged from the river. After this is done, the railway wharves must be built before the City can enter upon its own domain. Meanwhile, of course, there will be nothing to prevent the laying of the rails for the contemplated four-track belt line that will skirt the lower Schuylkill and the Delaware.

It is estimated that three years will be required to make the changes, and the City will be called upon to furnish something like \$6,000,000 to aid in the grade crossing eradication. It has some funds available at present. But it will need many millions to construct the nest of wharves for which plans have been made. Where is the money coming from?

Foresight is paving the way. The late Legislature adopted a resolution proposing a constitutional amendment under which Philadelphia is given the authority to borrow \$25,000,000, regardless of debt limitations, for the special purpose of wharf building. It will be necessary for the next Legislature to indorse that resolution and for the people in general election to ratify it. But if all goes well, in two years from November next the City will have the authority to borrow its \$25,000,000 and thus finance the wharf operation. In plenty of time, that will be.

The City contemplates taking over about one mile and a half of river front and constructing eventually, as needed, something like a score of immense wharves. It is a pity that work upon them cannot begin at once, for the Panama Canal will be in full operation by January 1, 1915, and very much is expected in the way of increased commerce because of it. There will be a demand for wharf facilities, and the port that can offer a cheap handling of freight is bound to benefit materially. But Philadelphia as a corporation will not be entirely wharfless. In addition to the great Greenwich improvement, two City wharves are to be constructed in the near future in the Queen Street section, which is in the immediate neighborhood of the Pennsylvania's transatlantic steamship piers, and a City wharf is under construction at Dock Street. So we are moving along.

It is gratifying to observe that, so far as heard from, the agreement is receiving the indorsement of the commercial interests. This, of course, means success. That Councils will give their approval cannot be doubted. When City officials, the railroads and the all-important Belt Line unite in a unanimous compact, nothing but Councilmanic consent can be anticipated.

GREAT MUNICIPAL IMPROVEMENT

The Press, July 9, 1913.

The arrangement just concluded by the Mayor with the several railroads having surface tracks in the southern section of the City is the biggest single step in municipal improvement that has been made here in this generation. It is not simply that a large number of grade crossings will be removed under the agreement, though this itself is an advance of inestimable magnitude. Grade crossings are always a grievous nuisance, but the tracks of the Baltimore and Ohio and the Pennsylvania Railroads in the extreme southern section of the City stopped the progress of improvement. They constituted a dead wall at which most streets and all building construction stopped. Improvement refused to go further south until these tracks were taken out of the way.

This will be done under the agreement, and the tracks of both railroads will be taken up and placed together along an extreme southerly course which will be out of the way and will be elevated over the larger portion of the route. This will throw open to improvement and building operations many thousand acres of land situated no further from City Hall than Fifty-second Street or Lehigh Avenue. Some of the land is low and requires filling in, but this can be done by dredging from the two rivers in order to secure the deeper harbor and the deeper docks which our commerce requires and which the new pier construction will make necessary.

The new large piers to be constructed by the City, and by the Pennsylvania and Baltimore and Ohio Railroads in addition, are one of the vital features of this arrangement. This long-delayed improvement has been hampered by many obstacles, but now apparently the way is secured for its

early realization. The interests and permanence of the Belt Line are also understood to be safeguarded and made a feature of this agreement for the improvement and development of South Philadelphia. The change of the railroad grade will probably be the first change in order; then the filling in of the low land, the extension of the street grades and the construction of piers can proceed apace. There has been so much delay that there is now need of hastening the good work.

The proposed elevation of the Washington Avenue tracks is one of the very gratifying features of this arrangement. They have long been an obstruction and nuisance and a source of delay to traffic, while offering an ever-present danger of collision. In the densely built-up section of the City they are almost the last surviving outpost of the persistent grade crossing not already in process of removal. They cannot go too soon, to the great relief of southern Philadelphia, now soon to experience a boom and an expansion that will carry its building lines to the League Island back channel that bounds the City's limits on the south.

A NEW SOUTH PHILADELPHIA

The Press, July 13, 1913.

The agreement to remove the surface railroad tracks in the southern part of the city and open that section to immediate improvement and settlement is recognized on all hands as an enormous advance step in the city's development. It not only will throw open more than four thousand unoccupied acres to building operation, but it prepares the way for the proposed wharf and dock development in the only section of the city which is free for large plans of the character in contemplation. The big empty southern wards within three and four miles of City Hall will fill up with homes and industries and a large area of land of high taxable value will be added to the city's assessed valuation.

As it is now it was recognized that the railroad tracks had to be readjusted and the grade of the land raised before the big tract could be utilized. In consequence even pioneer improvements held aloof from it until its final disposition was assured. It is a big point in favor of the arrangement

agreed upon that the Federal Government is willing to deliver its dredged material on to a portion of this area at a low rate. The pernicious practice formerly in vogue of depositing the material elsewhere in the river has been stopped, but it is hardly less sinful to waste it on the swamps of the New Jersey shore when it is needed to give elevation and drainage to the lowlands within the city limits just above League Island.

The cost of the removal of the grade crossings, including those on Washington Avenue, and the establishment of the new line will be \$18,758,000, divided between the city and the two railroad companies concerned. The city's share of this, \$9,769,000, is a low price to pay for the direct and incidental benefit to the municipality of opening up more than 4000 acres for home and factory sites and making available for development under city control of a mile and a half of unutilized Delaware River front comparatively near the busiest section of the port.

The improvement there made possible should be pushed forward without further delay. It means that a new and large city will spring up on what is now waste and unutilized land and that the building of Philadelphia will be completed southward to the junction of the Schuylkill and Delaware Rivers.

A GREAT STEP FORWARD

The Philadelphia Record, July 8, 1913

In broad comprehensiveness for the correction of present evils, the development of the city's waterfront, the improvement of the railroads' freight terminal facilities and the opening up for business and residential purposes of a vast tract of now practically waste land, it is no exaggeration to say that in the whole history of Philadelphia no step has ever been taken that approaches the agreement reached yesterday between the city, the Pennsylvania and Baltimore & Ohio Railroads and the Belt Line. The conferences leading up to this understanding have been protracted, and at times progress has seemed provokingly slow, but in view of the magnitude of the changes to be made, the conflicting interests to be adjusted and the innumerable details to be

worked out, it can now be seen that rapid action was impossible. It is especially gratifying to find that the rights of the Belt Line have been fully protected, so that the river front can never be bottled up and competition excluded.

Important as is the proposed abolition of grade crossings in South Philadelphia through the entire removal of some tracks, the elevation of others and the rerouting of existing lines, we look upon the plans for the acquisition by the municipality of the extensive river front properties of the Pennsylvania and the Baltimore & Ohio Railroads at Snyder Avenue and Greenwich Point as likely to have a far greater influence upon the future development of Philadelphia. The possibilities opened up for a great combination of municipal piers and docks, ample and convenient railroad facilities and abundant space for the location of great industrial concerns are such that this portion of the Delaware River frontage is inevitably destined to become a district of vast commerce and importance.

It is gratifying to learn from Chief Webster, of the Survey Bureau, that in carrying out these broadminded plans for the city's future a greater foresight is to be shown than in past municipal planning. Not only are the 4000 acres of the Neck to be brought up to the requisite grade, but broad streets, diagonal avenues, parks and playgrounds are to be laid out in such a way as will be most conducive to the comfort and health of the great population that will make its future home there. Philadelphia will thus have a really unique opportunity to show what it can accomplish in the way of the most advanced city-building.

It augurs well for the future that in coming to an agreement upon these vast projected improvements all the interests involved have shown a desire to co-operate loyally for the welfare of the city. In the competition of communities this joint action is absolutely necessary if we are not to fall behind. It only remains for City Councils to set the seal of their approval upon the agreement reached. This they will, of course, be glad to do, and Philadelphia will then be prepared to make another great step forward.

SUCCESSFUL TEAM WORK

The Philadelphia Record, July 11, 1913.

In many ways the most impressive feature of the agreement just concluded between the city and the railroads for the abolition of grade crossings and the construction of new piers and terminal facilities is the spirit of team work displayed between the municipality and the corporations. The officials tackled the many intricate problems involved with the one idea that, if they were to be solved successfully, there must be complete co-operation between all interests, as they were too big for any one party in the agreement to swing alone. Careful study was made of what future requirements were likely to be, and the sole desire seems to have been to reach a conclusion from which both railroads and city would derive the greatest profit, without either side attempting to take an undue advantage of the other.

In view of the remarkable growth of great cities, which is constantly giving rise to new difficulties and new problems, it is evident that these can only be met successfully when there is a spirit of harmonious co-operation between all the great interests, instead of the old policy of individual action which prevailed so long. It is in this spirit that Philadelphia is preparing to construct a municipal subway—an enterprise far exceeding the present financial powers of the Rapid Transit Company. In the same way New York and Boston have spent vast sums in the construction of municipal subways and elevated lines, which have been turned over to private companies for operation. They have also gone to great expense, as has Philadelphia, in building piers for the use of steamship lines in which they have no direct interest.

The truth is that in the growing competition of communities the necessary outlays required for great undertakings are so vast that private effort could not supply the needed capital, even if it should be desirable. It is roughly estimated that the contemplated improvements in South Philadelphia will cost some \$18,000,000, but the chances are that the figures will greatly exceed that amount. With the expense divided between three the burden will not be excessive on any one. It is to be hoped that in working out the problems involved in providing a more complete system of

rapid transit for Philadelphia and in operating it the same spirit of harmonious co-operation will be followed. It is the only sane and logical method. Both the city and the public utility corporations have wants which are too big and intricate to be grappled with single-handed, and to achieve the best results all interests must work together in the spirit with which the South Philadelphia situation has been faced.

THE SOUTH PHILADELPHIA AGREEMENT

The Evening Bulletin, July 8, 1913.

The obvious advantages to the public interest to be gained by the elimination of grade crossings in South Philadelphia, the completion of a belt line and the opportunity for important waterfront development, involved in the tentative agreement which has been reached by representatives of the city and of the railroads, are so many that the inclination is for immediate and hearty approval. But the undertaking is of such importance and scope, affecting so many interests, present and future, that no plans should be accepted without full and careful consideration, for which the public is now given its first opportunity.

The abolition of the grade crossing in South Philadelphia is a public necessity, and there is full warrant for whatever expenditure of money may be required on this account, even without taking into consideration the increased revenue which will be returned to the city, in compensation for this expenditure, through the development of large areas of land for available and desirable building purposes. From some points of view it is a matter of regret that Washington Avenue must continue to be a railroad route, crossing Broad Street and parallel streets with its overhead construction, and if this is deemed necessary, the city should insist that the bridges and general overhead structure shall be of such a character as will least mar the aesthetic as well as the utilitarian development of the section. The retention of the surface tracks on Swanson Street and the paralleling of that line for a considerable distance on Vandalia Street also seem somewhat incongruous with the general scheme of the improvement, which is to relieve the public streets of railroad traffic, and it may be found worth while to consider whether, with the new belt line sweeping the water-

front, all necessary freight facilities cannot be furnished with shorter routes through the public streets than those which are now suggested.

Apparently the purpose of the original Belt Line has been carefully safeguarded. Provision of a right of way for its future extension paralleling the four-track line of the railroads is a wise and, perhaps, necessary precaution, but the more important thing is to make this four-track line subject to such regulation and supervision in the public interest that it shall serve every purpose of an "open gateway" to the docks, so that the additional tracks shall not be necessary. The city, by reason of its contribution toward the cost of this construction, if on no other grounds, is fully entitled to claim this right of supervision, and specific recognition of that right should be insisted on in the final draft of the agreement.

There should be no captious criticism of these plans. The ideal is not to be expected. The city must bargain with the railroads, and inevitably there must be some meeting ground and proper compromise in which the interests of all can be reasonably and fairly served. The city is to pay a large proportion of the cost of these improvements, something more than one-half of the total cost, but, while the city undoubtedly is to get an equivalent for its expenditure in public improvements, the railroads also are to get improved facilities of which they are in sore need, and the city is to help them pay the bill. On this same basis alone the representatives of the city are fully warranted in asking for every consideration of the public interest, and will be guilty of no imposition on the railroads if they insist upon a large measure. The plan is one of large opportunity; it looks forward to the development of a new city in South Philadelphia, and for that reason, particularly, the retention of surface lines and all new construction should be considered in view of the city that is to be in that section, rather than merely in view of conditions as they exist to-day. Pending the submission of the final plans to Councils for adoption, the various situations and problems involved ought to be taken up for detailed and careful study in the public interest.

TO TRANSFORM THE NECK MODEL CITY TO BE LAID OUT UNDER REVISED STREET PLANS, AUTHORIZED UNDER THE BELT LINE AGREEMENT

The Evening Bulletin, July 9, 1913.

Of equal importance to the city with the improvement of its freight terminal facilities to be brought about as a result of the South Philadelphia railroad agreement will be the changes to be wrought in the tract of undeveloped territory lying south of Oregon Avenue, between the Delaware and Schuylkill Rivers. Where acres of marsh and lowlands now lie it is possible to make a model city grow, with broad streets and avenues, lined with grass plots and shade trees, and affording ample room for comfortable dwellings, each of which will have more yard space than it is customary to allow in other closely built up sections of the city. To accomplish this result it will be necessary to revise the present city plan for the district, but the authority to do this will be conferred on the Board of Surveyors under the terms of the agreement, which is to be submitted to Councils in the fall.

At present the undeveloped land covers about five thousand acres. Few streets have been opened through it, and those that exist are principally country roads. The blocks as plotted follow the old severe rectangular lines which were originated by the surveyor of William Penn, and to which there are many and obvious objections. There is need for more direct diagonal routes of travel, to give ready access to the docks and freight stations from the centre of the city. Not only will such cross avenues aid in beautifying the district by relieving the monotony of the solid rows, but they will permit of more scientific arrangement in accordance with the newest methods of city planning. But the chief object after which the city engineers are seeking is to compel the allowance of larger lots of ground for dwelling purposes.

The size of the average block, as now laid out, is about 380 feet square. Builders generally desire to erect six rows of houses in each block, opening two smaller intermediate streets to do it. Deducting the width of the two streets,

forty feet each, or eighty feet in all, it is readily seen that the average depth of each lot is about fifty feet, which is not enough to give sufficient yard space in the rear. To overcome this difficulty it is proposed to shift the main streets considerably, reducing their number and thus obtaining longer blocks and consequently deeper lots.

Twenty-two streets are now plotted from Delaware Avenue to Broad Street. Most of them are sixty feet wide. Instead it is planned to open only fifteen main streets, with greater distances between them. Every alternate street will be eighty-eight feet wide, with room for double tracks of car lines, while the other main streets will be but sixty-four feet wide and will have no tracks. Then, in place of two small streets cutting through every short block, there may be three, if desired, in every long block, the average depth of lot being about sixty-five feet instead of only fifty. The law requires that every dwelling shall have 144 square feet of yard space in the rear, but with only fifty feet depth this is crowding the limit rather close. With fifteen feet added to the depth of each lot, the yard can contain fully 250 square feet, without cramping the size of the house.

The detailed plans have not been worked out, and it will take a large amount of labor in the drafting rooms to finish the studies, but there are no difficult engineering feats to be overcome, and the fact that the land is still largely unencumbered with buildings will give the surveyors full opportunity to make the district the most modern residential quarter of the whole city.

WHERE RAIL AND WATER MEET IMPORTANCE OF THE TERMINAL YARD IN DOCK DEVELOPMENT

The Evening Bulletin, July 10, 1913.

The plans for the improvement of South Philadelphia in providing for a large classification yard to be shared jointly by the Pennsylvania and Baltimore & Ohio Railroads emphasize the importance of the terminal yard in port development. A series of large municipal wharves would be of little service unless co-ordinated and assisted by ade-

quate terminals and classification yards, where cars can be sorted and classified and trains made up with economy and dispatch.

The largest classification yard at present on the river front is the Port Richmond yard of the Philadelphia & Reading Railway, which is the most extensive terminal in the world conducted under the ownership of any one railroad. The terminal extends from the river to Richmond Street, and has a bulkhead frontage of 5273 feet. It covers an area of 156 acres, and its tracks have a storage capacity of 4000 cars, without congesting or in any way interfering with the movement of traffic on the main or working tracks. At this yard two modern-type electrically operated ore-unloading machines have been installed recently, which have a combined capacity of five tons a minute. The terminal has a grain elevator with a capacity of 1,500,000 bushels and a coal storage yard of 200,000 tons capacity, with suitable machinery for handling the same.

The Port Richmond terminal has six piers and nineteen trestles. The piers range in size from 414 to 800 feet in length and in breadth from 99 to 200 feet. In fact, five out of the six piers exceed in length any municipally owned pier in the port. In addition, the Reading Railway also operates yards at Willow Street and Fitzwater Street, and at Noble Street has five piers, three of which are over five hundred feet in length.

The largest yards of the Pennsylvania Railroad on the river front at present are located at Washington Avenue, Greenwich Point and Girard Point. Their combined capacity is 7000 cars. Thus the railroads at present have a river-front car storage yard capacity of 11,000 cars, in addition to which must be added the capacity of the East Side yard of the Baltimore & Ohio Railroad. The new terminal at the southeastern corner of the city will occupy an area of 600 acres, and will afford storage capacity for more cars than can be accommodated at present in all the river-front yards. Under the proposed contract, however, the Pennsylvania is to abandon the Greenwich yard and the Baltimore & Ohio to give up the Snyder Avenue yard. In turn, the Pennsylvania is to agree to extend its Washington Avenue yard, and

when the entire agreement is consummated Philadelphia probably will have a car storage capacity on its harbor front for 20,000 cars.

One of the most important factors in the shipment of goods is the time consumed by terminal delays. With its present facilities and under the present laws and regulations the Pennsylvania Railroad can operate from the Greenwich yard only one through freight per hour. The Philadelphia & Reading operates its through freights by the way of the Port Richmond terminal, with the exception of such small quantity as passes through Willow Street. The amount of traffic which the Reading can handle from the Port Richmond yard is somewhat larger than the amount which the Pennsylvania can handle from the Greenwich yard, but all freight coming in on the lower river front destined for the Reading must be carried over Delaware Avenue to Willow Street. Along the central portion of Delaware Avenue the operation of trains is forbidden during the daylight hours, and the present trackage is limited to two tracks for westbound and one track for eastbound freight. Railroad traffic on Delaware Avenue is subject to many interruptions due to the vehicular traffic and the difficulty in sorting and breaking cars, and that it takes nearly three hours to drive an engine from the lower end to Willow Street and return indicates the possibility of future traffic congestion.

While lacking at present the co-ordinated facilities of the Port Richmond terminal, the Pennsylvania Railroad owns and operates, with but two exceptions, the best wharves on the river front. At Walnut Street it has three piers ranging from 494 to 606 feet in length; at Washington Avenue it has six large piers, four of which are over 600 feet in length, and at Greenwich it has seven piers, mostly for coaling purposes.

To-day the railroads own and occupy fifty per cent. of the river front between Allegheny Avenue and Point House Wharf. Under the terms of the proposed contract this area will be increased, but this feature is not to the city's disadvantage, as it receives the Greenwich site, which is the best adapted for the construction of a series of municipal piers. Philadelphia will possess the two largest terminal yards in

any world port, but they will be widely separated and disconnected save for the three tracks on Delaware Avenue. From the great municipal docks in the southern section either car ferriage will be necessary to reach the Port Richmond terminal or else a detour of many miles over the Baltimore & Ohio tracks to Nicetown. South of Queen Street the rail facilities will be excellent for shipments through the southern classification yard, but north of Queen Street there is little opportunity for additional trackage save at the expenditure of large sums of money, a problem that must be reserved for some future time.

THE BELT LINE AGREEMENT

The Evening Telegraph, July 8, 1913.

Now that the city and the railroads have come to an agreement with regard to their conflicting interests in South Philadelphia, we may expect to see that section of the city begin its long-delayed development. The elimination of grade crossings removes a great peril to traffic of all kinds and will make life and property safer than under existing conditions.

The future of the Belt Line has been the centre of most public interest. Upon this point we have positive but not specific assurances that the agreement provides for the preservation of its present rights and franchises and insures its future as an independent corporation. We trust this contention will be borne out by the terms of the agreement when they are made public. This point is important and essential.

The other features of the agreement refer to the acquirement of 3000 feet of improved wharfage properties along the Delaware now owned by the railroads, and the development by the railroads of 4000 feet of water front, now marsh land. In return, the railroads obtain a large site for storage freight yards on both sides of Delaware Avenue south of Washington Avenue.

The development looked for in South Philadelphia should include the reclamation of long stretches of vacant land for building purposes, the vast increase of these tracts in value and the employment of large numbers of workmen

in all kinds of skilled and unskilled forms of labor consequent upon the development of this territory.

The picture painted of the city's future under this agreement and of the renaissance of our shipping trade is rosy in the extreme. We trust it is all coming true. It has been late in arriving, but it will be none the less welcome when it comes.

SUMMARY OF THINGS TO BE ACCOMPLISHED BY THE ORDINANCE AND AGREEMENT

1. Abolishment of grade crossings by elevating tracks:
 - (a) On Washington Avenue from Grays Ferry Avenue to 5th Street.
 - (b) Grays Ferry Avenue from 30th Street to Washington Avenue.
 - (c) 25th Street from Arsenal bridge over Schuylkill River to Point Breeze Avenue.
 - (d) Point Breeze Avenue from 25th to 29th Street.
2. Build elevated track on 29th Street from Point Breeze Avenue to Magazine Lane, thence on private right of way crossing over Penrose Ferry Avenue to near 25th Street, thence by descending grade to surface line passing through southern portion of League Island Park under Broad Street to Delaware Avenue, near Hoyt Street, thence along Delaware Avenue to Queen Street.
3. Belt Line to consist of that portion of road from 29th and Passyunk Road around the entire water front of the city to Delaware Avenue and Queen Street, which is to be a gateway for any new railroad desiring to enter the city.
4. All surface tracks to be removed from Washington Avenue from Grays Ferry Road to 5th Street and the street paved and restored to highway uses.
5. All tracks removed from Oregon Avenue from 23rd Street to Swanson Street and from 23rd Street from Oregon Avenue to Wolf Street and Wolf Street from

23rd to 29th Streets, and these streets graded and paved.

6. All surface tracks removed from 25th Street from Washington Avenue to a point above Packer Street.
7. All tracks removed from the present right of way of Delaware River extension, P. R. R. south of Packer Street, from 25th Street to Delaware Avenue.
8. The present surface tracks and yards leading to Girard Point to be removed.
9. Washington Avenue freight station (between Broad Street and 17th Street) to be elevated and an elevated storage yard to be constructed along Washington Avenue between 18th and 19th Streets.
10. Opening and grading of 29th Street from Passyunk Avenue to Magazine Lane and the opening and grading of Point Breeze Avenue from 25th to 29th Streets.
11. Building of a four-track viaduct through the plants of the Point Breeze Gas Works and the Atlantic Refining Co.
12. Building of a monumental bridge three hundred (300) feet wide, carrying Broad Street over the joint railroad, 600 feet north of entrance to League Island Navy Yard, with belvedere and other ornamental features, commanding a magnificent outlook over League Island Park and Navy Yard.
13. The construction of a 600-acre freight yard to be used by the P. R. R. and B. & O. R. R. in the extreme southeastern corner of the city.
14. The development by the railroads of 4000 feet of water front now marsh land.
15. The relinquishment of and purchase by the city of approximately 3400 feet of improved water front now owned by the railroads and capable of immediate improvement as municipal wharves.

16. Removal of all freight and siding tracks from the bed of Delaware Avenue and the arranging for the continuing of only the running tracks necessary to meet demands of commerce.
17. The construction by the P. R. R. of large storage freight yards on both sides of Delaware Avenue south of Washington Avenue.
18. Rearrangement of curb line on Swanson Street opposite Old Swedes Church so as to better preserve this old historical landmark.
19. Filling in of the land required for railroad yards near League Island Navy Yard by widening and deepening the Delaware Channel to the Philadelphia pier-head line.
20. Remove the present temporary bridge and hump along the line of Broad Street and over the Delaware Extension, P. R. R.
21. Provision is made for opening and for bridging all streets required for the development of the southern section of the city.
22. Opening up for development 4,000 acres, approximately six square miles, lying south of Oregon Avenue and between the Schuylkill and Delaware Rivers, a territory which up to now has been practically unavailable for development owing to the surface tracks of the two steam railroads.
23. The opening up of this territory for building purposes will necessarily divert it from its present uses—piggeries and poudrette pits and undrained marsh land.

AN ORDINANCE

Authorizing the execution of a contract between the City of Philadelphia, the Philadelphia, Baltimore and Washington Railroad Company, the Pennsylvania Railroad Company, the Schuylkill River East Side Railroad Company, the Baltimore and Ohio Railroad Company and the Philadelphia Belt Line Railroad Company, whereby the said Railroad Companies may change, relocate or elevate certain portions of the lines of railroad owned, leased or controlled and operated by them, and establish certain new lines, terminals and yards, with the necessary connections therewith, within that portion of the City of Philadelphia lying south of Christian Street between the Delaware and Schuylkill Rivers, and providing for the placing upon the city plan, the striking from the city plan and vacation, the widening and the revision of the lines and grades of streets; the opening and physical changes of streets; the alteration, construction and reconstruction of buildings, bridges, yards, tracks, terminals and operating appliances of the said railroads; the acquisition of property for railroad and highway purposes and for piers and other river front improvements; apportioning the expense of acquiring property, of opening, widening and revising streets, of constructing and reconstructing street fixtures, and of changing, relocating, constructing, reconstructing or elevating railroad tracks, terminals, yards and connections, and all other expense contingent to the work herein provided for, and defining the methods of making payment of the respective proportions of such expense; providing for the carrying out and completion of all the aforesaid work and all work of every character necessary for and incidental to the abolishment of certain existing grade crossings and the effectual establishment of a plan whereby the readjustment of railroad lines with reference to street crossings within the territory affected may be provided for. Also authorizing a general revision of the lines and grades of streets; the amendment of the Ordinance approved December 26, 1890, authorizing the construction of the Philadelphia Belt Line Railroad; and the making of an appropriation for the City's proportion of the cost of the work provided for in the said contract.

Section 1. The Select and Common Councils of the City of Philadelphia do ordain, That pursuant to the power and authority vested in the City of Philadelphia under and by virtue of the Act of the General Assembly of the State of Pennsylvania, entitled "An Act to authorize the counties, cities, towns and townships of this State, respectively, to enter into contracts with railroad companies whose roads enter into their limits, whereby said companies may relocate, change or elevate their railroads," approved the ninth day of June, 1874; of the rights and powers of the Railroad Companies, and of all other power enabling the parties to act in the premises, the said the City of Philadelphia is hereby authorized to enter into a contract with the Philadelphia, Baltimore and Washington Railroad Company,

the Pennsylvania Railroad Company, the Schuylkill River East Side Railroad Company, the Baltimore and Ohio Railroad Company and the Philadelphia Belt Line Railroad Company, which shall be in the form following for the purpose of accomplishing the objects set out in the recitals and covenants therein contained:

THIS AGREEMENT, made this _____ day of _____ 1913, by and between the CITY OF PHILADELPHIA, hereinafter called the "City", party of the first part, the PHILADELPHIA, BALTIMORE AND WASHINGTON RAILROAD COMPANY and THE PENNSYLVANIA RAILROAD COMPANY, hereinafter called for convenience the "Pennsylvania Companies", parties of the second part, and the SCHUYLKILL RIVER EAST SIDE RAILROAD COMPANY and the BALTIMORE AND OHIO RAILROAD COMPANY, for itself and as the owner and operator of the said Schuylkill River East Side Railroad Company, hereinafter called for convenience the "Baltimore Companies", parties of the third part, (said "Pennsylvania Companies" and "Baltimore Companies", when referred to jointly, being also hereinafter sometimes called the "Railroad Companies") and THE PHILADELPHIA BELT LINE RAILROAD COMPANY, hereinafter called, for convenience, "Belt Line Company", party of the fourth part.

WHEREAS, under and by an Ordinance of the Select and Common Councils of the said City, approved the day of _____, 1913, the proper officers of the City of Philadelphia were authorized to enter into a contract with the Pennsylvania Companies and the Baltimore Companies and the Belt Line Company whereby the said Companies parties to this agreement may respectively change, widen, straighten, or otherwise improve, relocate, extend, construct, reconstruct and elevate certain portions of the lines of railroad owned, leased, controlled, or operated by them, and establish new lines, terminals and yards with the necessary connections therewith, within that portion of the City of Philadelphia lying south of Christian Street and between the Delaware and Schuylkill Rivers, so as to abolish numerous grade crossings and enable the City to revise the lines and grades of streets, carry out its plans for the improvement of that section of the City, and make suitable provision for the location and subsequent construction, extension and improvement of its docks, wharves, etc.

AND WHEREAS, the said City and said Pennsylvania Companies, Baltimore Companies and the Belt Line Company have duly negotiated concerning, and definitely agreed upon, the terms and conditions for said contract and are now about to execute the same accordingly.

Now, Therefore, this Agreement Witnesseth that, for and in consideration of the premises and privileges and ad-

vantages to each of them thereunto moving and the mutual covenants hereinafter contained and set forth, the said parties hereto have mutually covenanted and agreed, and by these presents do hereby severally covenant and agree, to and with each other, as follows:

First.—The City hereby covenants and agrees that the said Pennsylvania Companies, the Baltimore Companies and the Belt Line Company may change, widen, straighten, or otherwise improve and relocate, extend, construct, reconstruct and elevate the certain portions of the lines of railroad owned, held, or controlled and operated by them, hereinafter specifically mentioned; may provide for railroad yards and terminals; may provide for the alteration and construction or reconstruction of buildings, bridges, tracks and operating appliances on the said lines of railroad; and may carry out and complete the work of every character necessary and incidental to the fulfillment of the purposes of said Ordinance, in so far as they are, or may be, affected thereby, as fully and effectually in all things as mentioned and provided for therein, and the City hereby further agrees to take all action that is or may be necessary upon its part to enable the said Companies to comply with the provisions of said Ordinance and to carry into effect the work covered by this agreement. The following are the lines of railroad affected by this agreement:—

(1) The Washington Avenue Branch of the Philadelphia, Baltimore and Washington Railroad from Thirtieth Street and Gray's Ferry Avenue to the Delaware River; (2) the Delaware Extension of the Pennsylvania Railroad from the Arsenal Bridge over the Schuylkill River to Delaware Avenue and Queen Street; (3) the Girard Point Branch of the Pennsylvania Railroad from Hamburg Junction to Girard Point; (4) the Schuylkill River Branch Extension of the Pennsylvania Railroad from its connection with the Girard Point Branch to its terminus east of Broad street; and (5) the Schuylkill River East Side Railroad from near Vare Avenue, in its East Side Yard along the Schuylkill River, to Shunk and Vandalia Streets; and (6) the Philadelphia Belt Line Company from Queen Street to Point Breeze.

Second.—The said City covenants, promises and agrees to make such general revision of the lines and grades of streets as may be necessary to complete the City plan and provide for the improvements within the territory south of Christian Street and between the Delaware and Schuylkill Rivers, and, in connection therewith, to vacate such streets; to place such streets on the City plan and to make such revision of the lines and grades of streets crossing and adjacent to the lines of railroad herein specifically mentioned, and the yards, facilities and appurtenances thereon

and thereof, as may be necessary to properly provide for the execution of the work to be co-operatively undertaken and completed by the City and the respective Railroad Companies in accordance with this agreement.

Third.—The City covenants, promises and agrees to issue the usual notices to all owners whose property may be affected by the work to be done under this agreement and to notify the owners of property over and through which the following streets, as laid out and revised under authority of the Ordinance authorizing this agreement, will pass, that at the expiration of three months from the date of said notices said streets will be required for public use: Twenty-fifth Street, from Washington Avenue to Point Breeze Avenue; Point Breeze Avenue, from Twenty-fifth Street to Wolf Street; Twenty-ninth Street, from Passyunk Avenue to Magazine Lane; and Delaware Avenue from the north side of Bigler Street to the north property line of the proposed terminal yards of the Pennsylvania Companies. Upon the execution of this agreement and the confirmation of any or all of the revisions of the City plan provided for in Article Second hereof, the Mayor shall enter security, on behalf of the City, for the payment of any and all damages which may be caused in carrying into effect any and all of the work herein authorized. Upon the filing of the said security and at the expiration of the time limit of the notice provided for in this Article, the Director of the Department of Public Works of the City (hereinafter, for convenience called "Director") shall enter upon and take for public use such properties as may be required to enable said Ordinance to be carried into full and complete effect and the work of construction shall be commenced as soon thereafter as possible and at as many points as practicable upon each line of railroad and upon the streets in so far as they shall or may affect the same, and shall be carried to completion by the City and the Railroad Companies, respectively, with the least possible delay or interruption, which date shall not be later than three years from the date of this agreement. In the event of delay due to failure to obtain right of way for railroads required to be constructed, or to strikes, injunctions or other causes beyond the control of the Railroad Companies or the City, suitable extension beyond three years shall be agreed upon by the City and the Railroad Companies.

Fourth.—The City covenants, promises and agrees to prepare plans and specifications for and to carry out, so far as they may be affected or are made necessary by the work provided for in this agreement, the grading, paving or repaving, and setting or resetting of curbs to the lines and grades established under authority of said Ordinance upon all streets legally or physically opened prior to the approval

of said Ordinance; the grading and drainage of the streets authorized to be opened by Article Third hereof; the construction, reconstruction and alteration or removal of all sewers, water and gas mains, electrical conduits and municipal structures and street improvements and their appurtenances and the underpinning or removal of buildings adjacent to the work. Provided, however, that the curbing and paving of Delaware Avenue shall apply only to that portion of said avenue between Queen Street and Reed Street and the paving of intersections of all legally and physically opened streets crossing said Delaware Avenue between Reed and Bigler Streets, inclusive.

Upon the approval of the said plans and specifications by the Chief Engineer or Chief Engineers (hereinafter for convenience called "Engineer" or "Engineers") of the Railroad Companies interested in and affected by the same, the said Director shall advertise for proposals and enter into contracts, to be approved by the Engineer, or Engineers, of the said Railroad Companies affected, for the work covered by the said plans and specifications and said work shall be carried out by and under the supervision of the City. The said plans, specifications and contracts shall be identified by the signatures of the said Director, the Chief Engineer of the Bureau of Surveys of the City and the Engineer, or Engineers, of the said Railroad Companies and shall be filed and preserved in the Department of Public Works and copies shall be furnished to the said Railroad Companies.

Fifth.—The Pennsylvania Companies and the Baltimore Companies covenant, promise and agree to prepare plans and specifications for the work of changing, widening, straightening, improving, relocating, extending, constructing or reconstructing and elevating their respective railroads, tracks, yards, terminals and work appurtenant thereto, and to enter into the necessary contracts for and to carry out all of said work.

The said plans and specifications shall be separated and divided into such parts or sections as shall, in the opinion of the Engineer, or Engineers, of the Railroad Companies affected and the Director, tend to facilitate and promote the most speedy and economical execution of the work. The following general provisions shall govern the preparation of the plans and specifications and the conduct of the work:—

The tracks and yards of the Washington Avenue Branch of the Philadelphia, Baltimore and Washington Railroad along Gray's Ferry Avenue from Thirty-first Street to Twenty-fifth Street shall continue to occupy their present location, or such new location as shall be shown upon the

plans and approved as herein provided for, and such branch shall be reconstructed as a two track elevated railroad upon an earthen embankment and a metal, or metal and concrete, or masonry structure on a new grade beginning near Thirtieth Street and Gray's Ferry Avenue, and extending thence to a connection with, or crossing at grade of, the Delaware Extension of the Pennsylvania Railroad at or near Twenty-fifth Street and Washington Avenue, at such an elevation as will carry said line adjacent to Gray's Ferry Avenue over all intersecting streets now legally opened with a clear headroom of at least fourteen feet. From Twenty-fifth Street to Sixth Street the said Washington Avenue Branch shall be reconstructed as an elevated railroad, with three tracks to Seventeenth Street and two tracks to Sixth Street, upon a metal, or metal and concrete, or masonry structure on a new grade beginning at a point of connection with the herein-after described elevated line of the said Delaware Extension of the Pennsylvania Railroad near Gray's Ferry Avenue and passing along and above Washington Avenue, and over all intersecting streets now legally or physically opened, with a clear headroom of at least fourteen feet above the surface of same to the east building line of Sixth Street, and thence as a two track railroad on a descending grade between concrete or masonry retaining walls to the west building line of Fifth Street, at or near which point said tracks shall connect at grade with the present or revised tracks of the said Washington Avenue Branch on Washington Avenue. To replace the present tracks on Washington Avenue between Twenty-fifth Street and Broad Street, which are used for storage purposes, a storage yard shall be provided on property to be acquired between Washington Avenue and Ellsworth Street and between Eighteenth Street and Nineteenth Street. The present storage and delivery tracks and freight stations located between Washington Avenue and Carpenter Street and between Seventeenth Street and Broad Street shall be reconstructed in such a manner as to provide, upon the same grade as the new elevated structure on Washington Avenue, facilities equal in capacity to those now existing, with provision for an inclined driveway, on property to be acquired for that purpose, from the street level to the reconstructed carload delivery yard. Likewise storage and delivery yards and facilities shall be provided in place of those to be abandoned between Broad Street and Fifth Street.

The tracks of the Delaware Extension of the Pennsylvania Railroad shall continue to occupy approximately their present location from the Arsenal Bridge over the Schuylkill River to near Twenty-fifth and McKean Streets, from which point they shall curve to the westward and occupy Point Breeze Avenue, as revised and

widened, to near Twenty-ninth and Wolf Streets, where they shall curve to the southward to a right of way west of the west building line of Twenty-ninth Street, continuing on said right of way to Passyunk Avenue, where said tracks shall curve to the eastward into Twenty-ninth Street and occupy a portion thereof to Magazine Lane at which point they shall curve slightly to the westward on right of way west of the west building line of Twenty-ninth Street to Penrose Avenue, thence curving to the eastward on property of the Girard Point Storage Company and on a right of way north of Government Avenue and through League Island Park, and under Broad Street at a point not less than six hundred feet north of the property line of the Philadelphia Navy Yard, thence to a connection east of Broad Street with the proposed terminal yard of the Pennsylvania Companies, provided for in Article Tenth hereof. From said connection east of Broad Street the said Delaware Extension of the Pennsylvania Railroad shall continue in a diagonal line directly north of the said proposed terminal yards to Delaware Avenue and Hoyt Street, thence northwardly along Delaware Avenue to Bigler Street, at which point they shall connect with the present tracks of the Pennsylvania Companies as relocated to Queen Street. A single track switching line may be constructed at grade by the Pennsylvania Companies, at their expense, along Vandalia Street from the above described relocated line of the Delaware Extension to Packer Street and thence diagonally to a connection at Pollock Street with the present tracks of the Swanson Street Branch of the Pennsylvania Companies.

The said Delaware Extension of the Pennsylvania Railroad shall be reconstructed as a two-track elevated railroad (with no opposing grade exceeding 0.3% south or east bound and 0.6% north or west bound, with proper compensation for curvature), on an earthen embankment between retaining walls from the Arsenal Bridge over the Schuylkill River to the north side of Washington Avenue, with a metal, or metal and concrete, or masonry bridge over Gray's Ferry Avenue having a clearance of not less than fourteen feet above the revised grade thereof, and upon a metal, or metal and concrete, or masonry viaduct from the north side of Washington Avenue to the south side of Wolf Street, west of Twenty-ninth Street, thence on an earthen embankment to the north side of Passyunk Avenue, alongside of a similar two track structure (hereinafter described) to be built by the Baltimore Companies as a portion of the relocated Schuylkill River East Side Railroad, thence as a two-track metal, or metal and concrete, or masonry viaduct within the building lines of Twenty-ninth Street to the south side of Magazine Lane, at such an elevation through-

out as to give not less than fourteen feet clearance above the grades of all intersecting or longitudinal streets now opened or agreed to be opened; thence curving on right of way west of the west building line of Twenty-ninth Street on an earthen embankment and with metal, or metal and concrete, or masonry bridges over the intersecting streets hereinafter enumerated, with a clearance of not less than fourteen feet above the grades thereof, to the south side of Penrose Avenue; thence on a descending grade to and under Broad Street at the point hereinbefore described; thence as a two track railroad east of Broad Street and north of the said proposed terminal yards of the Pennsylvania Companies, substantially on the same grade as the streets to be opened directly north of said yards (but which streets between Broad Street and Delaware Avenue shall not now or hereafter be extended to cross said tracks at grade) to the connection with the tracks of the Pennsylvania Companies on Delaware Avenue near Dieker Street, and thence along Delaware Avenue to Queen Street.

The tracks of the Schuylkill River East Side Railroad shall continue approximately on their present route to near Thirtieth and Wolf Streets, from which point they shall curve to the southward into a right of way west of and adjoining the relocated tracks of the Delaware Extension of the Pennsylvania Railroad; thence continuing parallel with and directly alongside of the said tracks of the Delaware Extension of the Pennsylvania Railroad to a connection with terminal yards to be constructed by the Baltimore Companies between Broad Street and the Delaware River and south of the terminal yards of the Pennsylvania Companies. From said point of connection east of Broad Street the Schuylkill River East Side Railroad shall continue also parallel and adjacent to the tracks of the Delaware Extension of the Pennsylvania Railroad north of the hereinbefore mentioned terminal yards of the Pennsylvania Companies to Delaware Avenue, thence along the latter avenue to Vandalia Street, there connecting with the tracks of the Baltimore Companies. The track of the Baltimore Companies in the bed of Vandalia Street may, at the expense of the Baltimore Companies, be extended as a single track switching line southwardly in the bed of said street from Oregon Avenue to a connection with the relocated Schuylkill River East Side Railroad.

The Schuylkill River East Side Railroad shall be constructed as a two-track elevated railroad (with no opposing grade exceeding 0.6% in either direction, with proper compensation for curvature) on an earthen embankment from a point near Vare Avenue, in its East Side Yard along the Schuylkill River, to a point near Twenty-ninth and Ritner Streets where same shall adjoin the tracks of

the relocated Delaware Extension of the Pennsylvania Railroad, with metal, or metal and concrete, or masonry bridges over the streets now opened or agreed to be opened, having a clearance of not less than fourteen feet above the grades thereof; thence on an earthen embankment to the north side of Passyunk Avenue, and thence following the line and grade and same construction of said Delaware Extension of the Pennsylvania Railroad (hereinbefore described) to and under Broad Street to the proposed terminal yards of the Baltimore Companies and a connection with the tracks of the latter Companies at Delaware Avenue and Vandalia Street.

To replace the existing connections and sidings of the respective Companies with or into the various industries north of Jackson Street which they now serve, proper and satisfactory connections shall be made from the relocated, reconstructed and elevated lines of railroad in cases where satisfactory plans can be worked out, the cost of elevating that portion of such existing connections and sidings extending to the line of private property to be included as part of the work the cost of which, under this agreement, is to be shared jointly by the Railroad Companies and the City, and the cost of the elevation of such connections and sidings beyond said line to be borne wholly by the owners thereof. Proper and satisfactory connections for joint use shall also be made from the relocated, reconstructed and elevated lines of railroads of the respective Companies to the existing or readjusted tracks in the works of the Atlantic Refining Company, the United Gas Improvement Company, the Philadelphia Navy Yard, and, for the use of the Pennsylvania Companies, to those of the Girard Point Storage Company, which readjustment of tracks shall also be carried out as a part of the work covered by this agreement.

Connections and sidings into present and future industries, business establishments, warehouses and piers may be made from the relocated, reconstructed and elevated lines of railroad herein provided for when the same are requested by the owners of said industries, business establishments, warehouses and piers located along the lines of said railroads, but no part of such expense thereof shall be borne by the City.

All tracks, yards and rights of way, and all existing rail connections not otherwise herein provided for or a necessary part of the work herein authorized, along the following lines shall be abandoned for railroad purposes, viz., the present line of the Delaware Extension of the Pennsylvania Railroad from Twenty-fifth Street, near McKean Street, to Delaware Avenue and Bigler Street; the Girard Point Branch of the Pennsylvania Railroad from Hamburg Junction, near Twenty-fifth and Bigler Streets, to the south

side of Penrose Avenue; the Schuylkill River Branch Extension of the Pennsylvania Railroad from its connection with the Girard Point Branch to its terminus east of Broad Street, and the present line of the Schuylkill River East Side Railroad from near Thirtieth and Wolf Streets to the intersection of Shunk and Vandalia Streets.

Unless otherwise provided for herein each of these lines shall be abandoned and the tracks and operating appurtenances and appliances removed immediately upon the completion and operation of any new line of railroad herein provided for which it is intended shall be used as a substitute.

The construction work shall include the following items:—the necessary alteration, construction, and reconstruction of railroad yards, yard tracks and yard buildings, freight stations, signal towers, coaling stations, and other railroad structures and their appurtenances, and all necessary tracks and operating appliances of said railroads, including telegraph, telephone and electric light lines, block signals, signal bridges and interlocking plants between the terminal points named in this Article, with as good accommodations as now exist and with complete and convenient facilities newly constructed, for conducting business and operating the said railroads, and with provisions for the continuance of track connections, wherever feasible, with commercial and industrial establishments now having such connections along all lines authorized to be reconstructed; the construction of the necessary elevated structures, bridges, embankments, abutments, and retaining and other masonry walls; the construction, reconstruction and removal of temporary railroad tracks and the maintenance of railroad and highway travel during construction.

All of the plans, specifications and contracts provided for in this section shall be submitted to and approved by the said Director and the Chief Engineer of the Bureau of Surveys, and shall be identified by the signatures of the said Director and the Chief Engineer of the Bureau of Surveys, and the Engineer or Engineers of the Railroad Companies affected, and copies thereof shall be filed and preserved in the Department of Public Works.

Sixth.—It is understood and agreed between the City and the Railroad Companies that in the relocation, construction, reconstruction and elevation of the lines of railroad referred to in Article Fifth hereof, the following streets shall be opened and graded to their full width as now upon the City plan, or as placed upon the City plan, or as revised under authority of the ordinance authorizing this work, and the cost thereof shall be included in the cost of the

work:—Twenty-fifth Street, from Washington Avenue to Point Breeze Avenue; Point Breeze Avenue, from Twenty-fifth street to Wolf Street; Twenty-ninth Street, from Passyunk Avenue to Magazine Lane; and Delaware Avenue from the north side of Bigler Street to the north property line of the proposed terminal yards of the Pennsylvania Companies at Hoyt Street. And it is further understood and agreed that provision shall be made to permit of the physical opening of so much of the following streets as are now upon the City plan, or as revised and placed thereon under authority of said Ordinance, as lie upon or across the rights-of-way of the Pennsylvania Companies and the Baltimore Companies respectively:—

WASHINGTON AVENUE BRANCH OF THE PHILADELPHIA, BALTIMORE AND WASHINGTON RAILROAD:

Twenty-eighth Street; Federal Street east of Twenty-eighth Street; Annin Street; Ellsworth Street; Twenty-seventh Street; Washington Avenue longitudinally, and all intersecting streets, between Gray's Ferry Avenue and Fifth Street, except the central portion of Washington Avenue between the east building line of Sixth Street and the west building line of Fifth Street, which will be occupied by the two track railroad to be constructed between retaining walls.

DELAWARE EXTENSION OF THE PENNSYLVANIA RAILROAD:

Gray's Ferry Avenue; Washington Avenue; Twenty-fifth Street, longitudinally, and all intersecting streets, from Washington Avenue to Point Breeze Avenue; Point Breeze Avenue and all intersecting streets between Twenty-fifth and Twenty-ninth Streets; Twenty-ninth Street, Vare Avenue; Passyunk Avenue; Twenty-ninth Street longitudinally, and all intersecting streets, from Passyunk Avenue to, and including, Magazine Lane; Sixty-third Street as extended from west of the Schuylkill River; Pattison Avenue; Penrose Avenue; Pennypacker Avenue, and one street to be opened on the line of Twenty-sixth Street, or between Twenty-fifth and Twenty-sixth Streets.

SCHUYLKILL RIVER EAST SIDE RAILROAD:

Schuylkill Avenue; Passyunk Avenue; Twenty-ninth Street longitudinally, and all intersecting streets, from Passyunk Avenue to, and including, Magazine Lane; Sixty-third Street as extended from west of Schuylkill River; Pattison Avenue; Penrose Avenue; Pennypacker Avenue, and one street to be opened on the line of Twenty-sixth Street, or between Twenty-fifth and Twenty-sixth Streets.

Broad Street shall be carried over the tracks of the Delaware Extension of the Pennsylvania Railroad and the Schuylkill River East Side Railroad, at the point hereinbefore designated, and with a clearance of not less than nineteen feet above the tops of the rails of the said tracks to the underside of the proposed bridge carrying Broad Street. The elevation of tops of rails of said tracks need not be lower than + 1.0 City datum.

The viaducts and bridges to carry the said railroads shall be constructed so as to give a clearance of not less than fourteen feet above the grades of all avenues and streets passing underneath the same, with the right, in special cases to be approved by the Director, to place steel columns within the curb lines of streets, and in the case of avenues one hundred feet or over in width, additional columns may be placed along the center lines thereof. In cases where streets or avenues are occupied longitudinally by elevated structures, columns may be placed in the driveways and within the curb lines of said streets or avenues.

In case the City desires in the future to open streets or avenues now on the City plan, or as revised under the authority of the said Ordinance, over or under the elevated and reconstructed railroads referred to, in addition to those hereinbefore enumerated, they shall be so opened as not to require any change in the grades of the said railroads, and such openings, including bridge construction, within the right of way lines of the Railroad Companies shall be at the equal expense of the City and the said Railroad Companies. The City agrees to strike from the City plan any and all streets and avenues that may now pass through the property which will, as herein provided, comprise the new terminal yards of the Railroad Companies situate between Broad Street and the Delaware River and south of the relocated lines of the said Companies.

No streets or avenues shall hereafter be laid out to cross at grade the portions of railroads of the Pennsylvania and Baltimore Companies herein provided to be elevated, or to cross at grade that part of the Delaware Extension of the Pennsylvania Railroad and the Schuylkill River East Side Railroad which is partly elevated and partly on the surface from Penrose Avenue to and under Broad Street, or the extension of the running tracks of the said Companies to Delaware Avenue, or the new terminal yards of the Railroad Companies lying between Broad Street and the Delaware River, except that the provisions of this paragraph shall not apply to the extension of the Swanson Street Branch southwardly to a connection with the relocated main running tracks of the Delaware Extension of the Pennsylvania Railroad, the extension of the Schuylkill River East

Side Railroad on Vandalia Street southwardly to a junction with the relocated main running tracks of the Baltimore Companies, nor to the surface tracks on Delaware Avenue. However, new connections between main running tracks and existing tracks and sidings now reached by the respective Railroad Companies to serve existing industries and branches may be constructed across streets at grade, but no connections to serve new industries shall be constructed across the full width of any street at grade without the approval of the City.

Seventh—It is further agreed by and between the City and the Railroad Companies that the general supervision of the work provided in Article Fourth hereof shall be in charge of the said Director, the Chief Engineer of the Bureau of Surveys or such engineer as the said Director shall designate for that duty, and that the general supervision of the work provided for in Article Fifth shall be in charge of the Engineer or Engineers of the Railroad Companies affected or such engineer or engineers as they shall designate for that duty. They shall confer with each other in respect to the plans and specifications for the various parts or portions of the work, and in respect to the performance of the work, at all times during the preparation and progress of the same, and each shall, upon notice from the other, or upon any fault or failure of any party, firm or corporation holding contracts for any part of said work, promptly proceed to secure full compliance with the plans and specifications pertaining thereto, in accordance with the provisions of the contract.

The Engineers of the Railroad Companies are authorized to employ such engineers, assistants, draughtsmen, engineering corps, and inspectors as may be necessary to prepare or examine plans and specifications and to insure the prompt and efficient execution of the work, and shall prepare the necessary certificates and other documentary records and accounts of the work under their supervision, which records and accounts shall at all times be open to inspection by the authorized representatives of the City. All expenses for salaries, transportation, office and incidental expenses of said engineering force, and the costs of inspection and tests not otherwise provided for, shall be included in the cost of the work.

The Director is hereby authorized to appoint such engineers, assistants, draughtsmen, engineering corps and inspectors as may be required to enable the Department of Public Works to prepare or examine plans and specifications, to properly inspect the work during progress of construction and to prepare the necessary certificates and other documentary records and accounts of the work under its super-

vision, which records and accounts shall at all times be open to inspection by the authorized representatives of the Railroad Companies. All expenses for salaries, transportation, office and incidental expenses of said engineering force, and the expenses of inspection and tests not otherwise provided for shall be included in the cost of the work.

In case of emergency work in maintaining railroad or highway travel, and in other cases where necessary, not covered by contract, the Engineer or Engineers of the Railroad Companies shall have authority to employ laborers and mechanics, hire machinery and purchase tools and materials to perform such work; a labor force account and an account of the machinery, tools and materials so used, including freight charges thereon at published rates, shall be kept and, after approval by the Engineer or Engineers of the Railroad Companies affected and the Director, shall be paid by the said Railroad Companies and included in the cost of the work.

In cases of emergency work in protecting and maintaining municipal structures, in other cases where necessary, and in such classes of work upon the highways as may not be covered by contract, the said Director is authorized to employ laborers and mechanics, hire machinery and purchase tools and materials to perform such work and a labor force account and an account of the machinery, tools and materials so used, including freight charges thereon at published rates, shall be kept, and, after approval by the Director and by the Engineer or Engineers of the Railroad Companies affected, shall be paid by the City and included in the cost of the work. After the completion of the work the repairs, maintenance and renewals of the driveways of streets and to sewers, gas and water pipes, conduits and municipal structures provided for or affected by this agreement, for which the Railroad Companies are to pay a share of the original cost, shall be made by, and at the sole expense of, the City.

In recording the cost of the work, the Railroad Companies (and the City may if it so desires) shall, for their own records, include interest during construction.

Eighth.—The said City hereby further agrees that the Pennsylvania Companies, the Baltimore Companies and the Belt Line Company shall, after the completion of the work required hereunder, be at liberty, from time to time, and at all times, to enter upon all streets, lanes or alleys, whereon the supports of the said several elevated structures shall rest, including bridge abutments, piers and all columns and other supports of the elevated structures of all kinds provided for herein, for the maintenance, renewal or repair of the same,

and each of them. Such work shall be done by and at the sole expense of the Railroad Companies affected and for this purpose the City shall issue such permits as may from time to time be required by the Railroad Companies.

Ninth.—It is further agreed that whenever and wherever, in the opinion of the Mayor of the City and the Pennsylvania Companies and the Baltimore Companies, the acquisition of property is necessary to carry out the purposes of this agreement such property may be acquired by purchase or gift, the City and the Railroad Companies co-operating with each other in such acquisition, or the said Railroad Companies shall exercise their right to appropriate property for railroad purposes, and the City shall exercise its right to appropriate property for public use, in any case where, under their powers, or the powers of either of them, such property may be lawfully appropriated.

Tenth.—With the exception of the yard tracks of the Girard Point Branch north of Penrose Avenue which are to be relocated alongside of the new four track running line west of Twenty-ninth Street and which now serve the yards and facilities of the Girard Point Storage Company south of that Avenue and the works of the Atlantic Refining Company and other industries north thereof, the Pennsylvania Companies hereby agree to abandon the use for railroad purposes of all existing yards along the running track and branches of the Delaware Extension of the Pennsylvania Railroad from a point south of Twenty-fifth and McKean Streets to Delaware Avenue and Bigler Street, together with the piers and terminal equipment at Greenwich Point, and to use, in lieu thereof, yards, piers, and terminal facilities to be constructed south of the south building line of Hoyt Street and between Broad Street and the Delaware River. The property so to be abandoned by the Pennsylvania Companies, shall, for the purposes of this agreement, be divided into two sections. *Section One* shall include the real estate, piers and terminal facilities and appurtenances (whether owned by the Pennsylvania Companies or others), located between the east line of Delaware Avenue and the pierhead line and between the north property line of the Pennsylvania Companies south of Bigler Street and the south building line of Hoyt Street, and *Section Two* shall include the remainder of the real estate and railroad facilities other than that used for the two running tracks so to be abandoned by the Pennsylvania Companies, namely, that situate between Twenty-fifth and McKean Streets and Delaware Avenue and Bigler Street.

The City hereby agrees to purchase, and the Pennsylvania Companies agree to sell, for municipal development of the water front or for other municipal purposes, but

not for sale or lease to any other railroad company now, or hereafter, incorporated, unless such railroad company be exclusively owned by the City, the real estate, piers, terminal facilities and appurtenances included in said Section One, and to pay therefor to the Pennsylvania Companies the appraised value of the said real estate based upon the purposes for which the same is now used, and an additional sum equivalent to the estimated cost of replacing in kind the piers, terminal facilities and appurtenances, including the cost of dredging between the pierhead line and the bulkhead line. The said appraised value of the real estate shall be determined by a board of three appraisers, one to be selected by the Mayor of the City and one by the Pennsylvania Companies, the two appraisers so chosen to select a third appraiser, and the decision of the said three appraisers, or a majority of them, shall be binding upon the Pennsylvania Companies and the City. In case either of the said parties fail to select an appraiser as aforesaid for the period of twenty days after written notice given by the other party to make such selection, then, in that event, the appraiser selected by the party not in default shall select an experienced appraiser for the defaulting party, and the three so chosen, or a majority of them, shall determine said value. The expense of said appraisal shall be borne equally by the City and the Pennsylvania Companies.

The cost of the real estate to provide the said new area equal to the area abandoned in Section Two and the cost of the new terminal yard and its facilities south of the south building line of Hoyt Street equal to that now used and enjoyed and which will be abandoned for railroad purposes by the Pennsylvania Companies in said Section Two shall be included in the general cost of the work herein provided to be borne equally by the City and the Pennsylvania Companies, but an appraisal shall be made of the value of real estate owned and of the market value of the materials comprising the railroad tracks and facilities so to be abandoned by the Pennsylvania Companies in said Section Two, and in the two running tracks from Twenty-fifth and McKean Streets to Delaware Avenue and Bigler Street, and in the Girard Point Branch and in the Schuylkill River Branch Extension, and one-half of said appraised value shall be credited to the City's proportion of said cost, but in no event shall the amount so credited for real estate in Section Two exceed the City's proportion of the said cost of the real estate obtained for the said new area and terminal facilities.

The Baltimore Companies hereby agree to abandon the use for railroad purposes of all existing yards and real estate which they may have along the running tracks and branches of the Schuylkill River East Side Railroad

tween a point in Wolf Street, near Thirtieth Street, and Shunk and Vandalia Streets, together with the piers and terminal facilities situated between McKean and Jackson Streets and between Delaware Avenue and the pierhead line, and to use in lieu thereof, real estate, yards, piers and terminal facilities to be acquired or constructed by the Baltimore Companies between Broad Street and the Delaware River and directly south of the new terminal yard of the Pennsylvania Companies hereinbefore mentioned.

The City hereby agrees to purchase, and the Baltimore Companies, for themselves and for any subsidiary company holding under or for them, agree to sell, for municipal development of the waterfront, or for other municipal purposes, but not for sale or lease to any other railroad company now, or hereafter, incorporated, unless such railroad company be exclusively owned by the City, the real estate, piers, terminal facilities and appurtenances of the said Baltimore Companies situate between McKean Street and Jackson Street and between the east line of Delaware Avenue and the pierhead line, and to pay therefor to the Baltimore Companies the appraised value of the said real estate, based upon the purposes for which the same is now used, and an additional sum equivalent to the estimated cost of replacing in kind the piers, terminal facilities and appurtenances, including the cost of dredging between the pierhead line and the bulkhead line. The said appraised value of the real estate shall be determined by a board of three appraisers, one to be selected by the Mayor of the City and one by the Baltimore Companies, the two appraisers so chosen to select a third appraiser, and the decision of the said three appraisers, or a majority of them, shall be binding upon the Baltimore Companies and the City. In case either of the said parties fail to select an appraiser as aforesaid for the period of twenty days after written notice given by the other party to make such selection, then, in that event, the appraiser selected by the party not in default shall select an experienced appraiser for the defaulting party, and the three so chosen, or a majority of them, shall determine said value. The expenses of said appraisal shall be borne equally by the City and the Baltimore Companies.

Real estate and yard facilities in the new area south of the said proposed yard of the Pennsylvania Companies equal to that abandoned by the Baltimore Companies—excepting real estate and yard facilities included in the area between McKean Street and Jackson Street and between the east line of Delaware Avenue and the pierhead line to be sold to the City—shall be provided in the manner hereinbefore set forth for the replacement of real estate and yard facilities abandoned by the Pennsylvania Companies in Section Two. If additional real estate is desired by the

said Pennsylvania Companies and the Baltimore Companies in their respective new areas the cost thereof shall be wholly paid for by the said Companies, as shall also the cost of all facilities for enlarging and extending the yard facilities so furnished in lieu of those abandoned.

The dredging of the Delaware River from the channel to the pierhead line of the terminal yards of the Pennsylvania Companies and the Baltimore Companies south of the south building line of Hoyt Street and the depositing of the dredged material within the limits of the said yards must be completed before the abandonment by the Pennsylvania Companies of the said Greenwich Point terminals between Bigler Street and the said south building line of Hoyt Street and the abandonment by the Baltimore Companies of their terminals between McKean and Jackson Streets and between Delaware Avenue and the pierhead line, and sufficient time allowed said Companies to construct on the material deposited the new terminal facilities and appurtenances. Provision shall be made for the said dredging and depositing of the material within the limits of the new yards and the cost thereof shall be borne jointly by the City and the Railroad Companies.

The Railroad Companies shall dedicate to the City so much of the property owned or controlled by them within the territory covered by this agreement as lies within the lines of any street now upon the city plan or placed thereon under authority of said ordinance, except such portions of streets as shall be actually occupied by solid elevated railroad structures and the City shall provide a right of way for the Railroad Companies over and through property owned or controlled by it required to carry out the purposes of this agreement, including the necessary right of way through League Island Park. In accordance therewith, the Pennsylvania Companies agree to dedicate to the City all property owned by them and to change and remove such buildings thereon and therefrom and readjust all tracks and facilities required for the opening of Delaware Avenue between Queen Street and Bigler Street and the City agrees to strike from the City plan and vacate Washington Avenue from Delaware Avenue to the pierhead line of the Delaware River, Ellsworth Street from Front Street eastward as far as the same is now legally open, Federal and Wharton Streets from Front Street eastward as far as the same are now upon the City plan, Water Street from Reed Street to Washington Avenue and Lee Street from Reed Street northward as far as the same is now open; and to widen Washington Avenue twenty feet on the south side from Front Street to Delaware Avenue, Reed Street thirty feet on the north side from Front Street to Delaware Avenue and Front Street twenty feet on the east side from Reed

Street to Washington Avenue, to permit of the construction and reconstruction by the Pennsylvania Companies between Reed Street and Queen Street of yards and yard facilities, the cost of that portion which is necessary to replace tracks for storage and yard facilities given up by the said Pennsylvania Companies in the adjustment necessitated by such opening of Delaware Avenue between Queen Street and Bigler Street—including the purchase of the property therefor between Reed Street and Washington Avenue; and Front Street and Delaware Avenues—shall be shared equally by the City and the Pennsylvania Companies. The Baltimore Companies agree to dedicate to the City all property owned by them between Jackson Street and Vandalia Street required for the opening of Delaware Avenue and the City agrees to strike from the City plan and vacate Dilworth and Severn Streets between Jackson Street and Snyder Avenue, and while Jackson Street, between Thirty-sixth Street and the Schuylkill River, is to remain as at present on the City plan, the same shall be used by the City only for sewer and drainage purposes and shall not hereafter be opened for highway purposes.

Eleventh.—It is further understood and agreed that, except where it is herein otherwise expressly provided, the City shall pay one-half and the Pennsylvania Companies and the Baltimore Companies shall pay one-half of the cost of all work on the said Companies' respective railroads in cases where the portions of relocated or improved lines of railroad will be used exclusively by either the Pennsylvania Companies or the Baltimore Companies, as well as that portion of the joint four track railroad on Delaware Avenue from Bigler Street to Vandalia Street, and that in the case of that portion of the respective two-track railroads of the Pennsylvania Companies and the Baltimore Companies (to be used as a part of the hereinafter mentioned joint four-track line) from a point near Twenty-ninth Street and Passyunk Avenue to Delaware Avenue and Bigler Street, the City shall pay two-fifths and the Railroad Companies three-fifths of all costs connected with the substitution of said four track railroad for the existing running lines of the respective Companies, except that the cost of the right of way required, as hereinafter in Article Sixteenth provided, for a six track line from Twenty-ninth Street and Magazine Lane to Delaware Avenue and Hoyt Street shall be borne in the proportion of three-fifths by the City and two-fifths by the said Railroad Companies. Each of the said Companies and said City shall and will make prompt payment of their respective proportions of said costs at such times and in the manner hereinafter set forth.

Twelfth.—It is agreed by and between the parties hereto that the Director shall arrange with the proper officials of

the Pennsylvania Companies and the Baltimore Companies to keep true and itemized accounts concerning the various payments and disbursements made, or to be made, by each upon all obligations whether assumed by contract or in any manner herein authorized. Settlements between the City and the said Companies—based upon said itemized accounts, duly certified—shall be made monthly as the work herein provided for shall progress and the said Director shall draw a warrant or warrants for any balance that may be payable to either the Pennsylvania Companies or the Baltimore Companies; in like manner the said Pennsylvania Companies and the Baltimore Companies shall promptly pay into the City Treasury all such sums as may be found to be due and payable to the City and all such sums shall be credited to the appropriation, and become immediately available for the work provided for herein.

Thirteenth.—It is hereby further mutually covenanted and agreed between the parties hereto that the City and the Pennsylvania Companies and the Baltimore Companies shall, in like proportion to the cost of the construction work on the various sections of the respective railroads of said Companies borne by the said parties, be liable for and will pay (a.) all claims for damages, or judgments for the recovery thereof, including interest and costs, arising from accidents due to, or arising from or incident to the execution of the work for which either party may be held to be responsible, excepting such accidents as may be due solely to negligence or carelessness in railroad operation, (b.) (excepting where otherwise herein provided) all damages arising from the opening, widening, vacation or physical changes in the lines or grades of streets, lanes or alleys at the points whereat and to the extent the same are made necessary by the work herein provided for, and (c.) (excepting where otherwise herein provided) all claims or judgments for the recovery thereof, including interest and costs which may arise from the consequential injury to persons, property or estates, arising from or growing out of the changes in location or elevation of the railroads of the Pennsylvania Companies and the Baltimore Companies; and for the more speedy and economical adjustment of claims arising or to arise hereunder, the City Solicitor, with the advice and consent of the Mayor, and the approval of the said Railroad Companies, shall compromise, settle and adjust any and all of such claims, and the Director shall draw warrants upon the City Treasurer for such sums as shall be required from time to time for the settlement and payment of such claims, the amounts thereof to be taken from the appropriations by said ordinance provided for: Provided, that when any claim shall be presented to or any suit on account thereof shall be brought against any of the said parties, the others have the

right, on due notice, to appear and defend, on their own behalf, or otherwise they shall not be bound by any judgment or decree in the premises. The City Solicitor shall arrange with the said Railroad Companies and their attorneys for a division of the work of preparing cases for trial, the preparation and production of testimony, and the conduct of hearings or trials, and all expenses connected with the defense of such claims or suits, save the service of the City Solicitor, or his associates, or of special counsel to be employed on behalf of the City, and the services of the attorneys or counsel of the Pennsylvania Companies and the Baltimore Companies, shall be included in and settled and paid for, as part of the expense of the work provided for herein.

Fourteenth.—It is mutually understood and agreed that, except as otherwise specifically provided for herein, the work contemplated and to be done under this agreement for which the cost is to be apportioned between the City and the Pennsylvania Companies and the Baltimore Companies, shall consist only of that which may be necessary to provide the various railroad lines affected with real estate equal in area and facilities for the handling of railroad traffic equal to those now used and enjoyed by them and only such changes of physically and legally open streets and municipal structures as may be necessitated by the changing, construction, reconstruction or elevation of the railroad lines under, over and adjoining such streets. All real estate for yards, rights-of-way or other railroad purposes and all construction work, including all labor, structural work, and material required for the same, intended to increase the traffic facilities of the said Railroad Companies, all new freight depots, signal towers, signals, telegraph or telephone stations or other appurtenances or improvements intended to increase traffic facilities and all changes or improvements to existing stations and appurtenances other than those required to adapt the present traffic facilities and appurtenances to the new conditions shall be wholly paid for by the said Companies.

Fifteenth.—It is mutually understood and agreed that, upon the completion of the work provided for, all real estate purchased by the Pennsylvania Companies and the Baltimore Companies, after the date of this agreement, for the use and benefit of the said work, but not actually used for the joint interest, and all old rails and other materials now in use by the said Pennsylvania Companies and Baltimore Companies, which may not be used in the construction of the new work, shall be disposed of at public sale and the proceeds thereof shall be credited to the joint appropriation. It is also further understood and agreed that upon the completion of the work provided for all old paving materials and street improvements removed from the work, but not actually used

for the joint interest, shall be disposed of at public sale and the proceeds thereof shall be credited to the joint appropriation. Provided, that should the Pennsylvania Companies or the Baltimore Companies desire to hold any of the said real estate, old rails or other materials so to be disposed of, an appraisalment of the value of the same shall be made and such appraised value credited to the joint appropriation. Provided, further, that should the City desire to hold any paving materials or street improvements removed from the work and so to be disposed of, an appraisalment of the value of the same shall be made and such appraised value credited to the joint appropriation.

Sixteenth.—The City deems it necessary that all railroad companies now or hereafter entering the City should have free access on equal terms to all public and private wharves on the Delaware River and desirable that what is popularly known as the "Belt Line" principle should be of the most general public application, and recognizes that the Philadelphia Belt Line Railroad Company, although legally a "corporation for profit," is in fact a corporation created and existing in the public interest. The railroad companies desire to co-operate in this policy so far as they may in complying with the terms of this agreement, having due regard to the existing investments of the moneys of their stock and bondholders and the additional investments to which they are obligated under this agreement. To carry out this common intent it is covenanted and agreed as follows, the words and phrases used in this Article being intended to be taken in their popular and usual acceptance and not in any technical sense, and the grant of a right being intended to include, without express definition, everything necessary for the exercise of such right.

1. Nothing in this agreement shall be construed as limiting or abrogating any agreement between the Belt Line Company, and other companies, nor any rights or franchises of the Belt Line Company, north of Queen Street.

2. The City hereby grants to the Belt Line Company the right to lay two tracks on Delaware Avenue from Queen Street to Hoyt Street, in consideration for which grant the Belt Line Company hereby relinquishes and surrenders all rights and privileges heretofore granted between said points for which rights hereby granted are a substitute.

3. The right of way for that portion of the joint railroad from Twenty-ninth Street and Magazine Lane to Delaware Avenue and Hoyt Street shall be of sufficient width to fully provide for six running or main tracks.

4. Two of which tracks with the necessary right of way shall be owned by the Pennsylvania Companies, two by the Baltimore Companies and two by the Belt Line Company.

5. The cost of acquiring said right of way shall be apportioned and borne as follows: 60 per cent. by the City, 20 per cent. by the Pennsylvania Companies, 20 per cent. by the Baltimore Companies. Between Magazine Lane and Passyunk Avenue the cost shall be borne two-fifths by the City and three-fifths by the two railroad companies.

6. In the interest of economy of expenditure, and to leave free for vehicular traffic the largest possible space on Delaware Avenue, it is not required that tracks shall at once be laid by the Belt Line Company either on Delaware Avenue or on its right of way west thereof to Magazine Lane, but such failure to lay tracks shall not constitute any default on the part of the said Belt Line Company, or be construed as prejudicing its rights under this agreement, until an additional track or tracks are needed to accommodate the business of any other user, in which case such track or tracks shall be laid by the Belt Line Company, the City, or by any other user designated by the City.

7. The construction of the relocated tracks of the Pennsylvania Companies and the Baltimore Companies from Twenty-ninth Street and Passyunk Avenue to Delaware Avenue and Vandalia Street shall proceed jointly, the said Pennsylvania Companies and the Baltimore Companies, however, to reserve the ownership in their respective double-track railroads, and each bear its proportion of the cost thereof provided by this agreement, and after construction shall each pay all interest and other obligations thereof. Pending the construction by the Belt Line Company of tracks on Delaware Avenue between Vandalia and Queen Streets, the Baltimore Companies may construct one or both of said tracks, and the Belt Line Company may use the same on terms to be agreed upon, or may take over the ownership thereof upon reimbursing the Baltimore Companies for the actual cost of said tracks, and pending such construction, the tracks of the Pennsylvania Companies on Delaware Avenue between Vandalia and Queen Streets shall be operated as a continuation or extension of the joint railroad, unless some other arrangement shall be made between said Companies. Upon completion, said joint railroad, including its main, passing and industrial tracks and facilities, shall be operated and maintained by the Pennsylvania Companies and the Baltimore Companies, as may be mutually agreed upon, as a joint railroad for the movement of trains, impartially and satisfactorily, for the present owners and future users hereinafter referred to.

There shall be constructed at grade, and operated as part of said railroad, such connections and crossings as may be necessary to adequately serve all owners and users. Operating, maintenance and renewal expenses, including taxes and

insurance, shall be borne in accordance with the number of engines and loaded and empty cars moving or moved over the line. Prior to and until the entrance thereon of another company, the Pennsylvania Companies and the Baltimore Companies shall each bear one-half of the cost of all future sidings, additions and betterments made for joint use. No charge shall be made for the occupancy or use for such purposes of the Belt Line's right of way, but whenever the two additional tracks (or one of them) are to be laid then all sidings, switches, additions and every track laid thereon shall be moved and relocated at the equal expense of all Companies then using said joint railroad, in such a manner as to permit of the laying and operation of said one or two additional tracks.

8. It is agreed that the joint railroad between Passyunk Avenue and Queen Street shall constitute an open gateway for the traffic of all railroads to the proposed new municipal docks, and the present and future commercial and industrial developments in the said southern portion of the City. To make this effective, the Pennsylvania Companies and the Baltimore Companies agree that if, after the construction and commencement of operation of said joint railroad, any standard-gauge steam railroad company, whether operated by steam or other motive power, and hereinafter designated for convenience as "using Company" or "users," shall desire to use the same between said points for the movement of traffic, it shall have the right to do so, upon the terms and subject to the limitations following, to wit:

(a.) It must have the requisite State and Municipal authority to construct and operate a line of railroad to a connection therewith, or to a connection with the Belt Line;

(b.) It must file with the City open evidence satisfactory to the Mayor of its financial ability to meet all necessary obligations, as a guarantee of which it shall deposit with a bank or trust company, satisfactory to the Mayor, the sum of Fifty Thousand Dollars (\$50,000), to be returned to it upon the written order of the Mayor when its road has been constructed and it has used the joint railroad for a period of six months;

(c.) It must pay as rental a proportionate share (1) (computed on the car and engine basis hereinbefore provided) of the total operating, maintenance and renewal expenses, including taxes, insurance and such other items as may now or hereafter be prescribed in the expense classification promulgated by the Interstate Commerce Commission; and (2) one-third of the interest at six per cent. (6%) per annum upon the total actual cost to said owning companies, respectively, of said joint railroad, including all addi-

tions, improvements and facilities forming a part thereof, and including also the value of the present lines of railroad of each of said Pennsylvania Companies and Baltimore Companies for which the joint railroad is a substitute, and such value of the Pennsylvania Companies is hereby fixed at \$ and of the Baltimore Companies at \$.

If there be two such other users, the rental to each shall be one-fourth of said cost, and in like proportion for each user, whenever the users and owners shall exceed four in number. If, however, an additional user shall at its own cost construct an additional track or tracks on the right of way of the Belt Line Company, it shall be credited with interest on such cost, and it shall be entitled to contribution in like manner from any subsequent user. In no event, however, shall any additional user be entitled to demand rental from the Pennsylvania Companies or Baltimore Companies, even if its outlay should exceed that of either of these Companies;

(d.) The cost of the said joint railroad shall be divided into two sections, one section including the portion on Delaware Avenue between Hoyt Street and Queen Street, and the other including the portion between Delaware Avenue and Hoyt Street, and Twenty-ninth Street and Passyunk Avenue, and any other company shall have the right to use either or both of said sections, and in the event of its using only one section, its rental as hereinbefore defined shall include interest only on the cost of that section plus half the value of the present lines abandoned by the Pennsylvania and Baltimore Companies. Should it subsequently use the other section, there shall be added to the rental interest on the remaining half of the value of the abandoned lines. In the calculation of rental the total actual cost to the owning companies shall include interest only for and during the period of construction, but not thereafter.

The bills for the rental prescribed herein shall be rendered and paid in accordance with recognized railroad practice. No dispute or question shall delay the payment of bills as rendered, but any adjustment necessary shall be made in the accounts of subsequent months.

9. Upon the construction of tracks additional to the four tracks to be forthwith constructed, the same shall thereupon become part of the joint railroad, so far as operation is concerned, so that there may be unanimity of operation of the joint railroad as a five or six track line, including mutual cross-over privileges, so as to furnish facilities to all users to reach both industrial establishments and wharves and docks now or hereafter existing.

It is further agreed that the Belt Line Company or the Baltimore Companies or the Pennsylvania Companies are hereby empowered to make a contract with, and confer upon,

any standard gauge steam railroad company the right to the use of the joint railroad upon complying with the terms and conditions hereinbefore expressed and paying the rental hereinbefore stipulated, and subject to all the terms and conditions of this agreement.

10. This agreement is intended to secure the right of equal usage of said joint railroad with the Pennsylvania Companies and the Baltimore Companies to all other companies, so that it shall in effect constitute an open gateway, but it is equally intended to prohibit and deny to any company access into or the use of the terminal yards, piers and other terminal facilities of any other company, except with their consent and approval, and on such terms as may be mutually agreed upon, and the property, tracks and facilities of the Girard Point Storage Company are included in the terminals of the Pennsylvania Companies.

11. The Pennsylvania Companies and Baltimore Companies agree that the joint railroad, including main, passing and industrial tracks and other facilities connected with and forming a part thereof, shall at all times be impartially operated, so that all users shall be accorded equal facilities and service.

12. It is further expressly understood that whenever the City of Philadelphia shall by Ordinance consent to the use of such joint railroad within the limits and upon the terms and conditions hereinbefore stated by any other such railroad company or companies, then this agreement, in so far as it relates to the said joint railroad, shall be taken and construed to be for the benefit and advantage of such railroad company or companies desiring to use the said joint railroad and for the benefit and advantage of the City of Philadelphia, having consented thereto as aforesaid, as well as for the benefit and advantage of the Pennsylvania Companies and the Baltimore Companies, and either the said City or the said railroad company or companies, or both, desiring to use the said joint railroad shall have the full and unrestricted right and capacity to enforce this provision of the agreement by legal or equitable process, or in any other manner whatsoever, to the same intent and with like force and effect as if such railroad company or companies had been specifically named and mentioned herein. It is the intention of the parties hereto that this clause shall be of the essence of this contract between them, and shall operate as a condition upon which this contract takes effect.

13. In case of disagreement between any of the parties hereto as to the meaning or construction of this Article, or any part thereof, or as to the respective rights and obligations of the parties thereunder, such points of contention or

matter as to which there may be failure to agree shall be submitted to the Interstate Commerce Commission (or such of their number as that body may designate) for decision and determination, and such decision shall be final, conclusive and binding, and no appeal shall be taken therefrom, nor shall the same be questioned in any forum or proceeding, except in a proper court for the sole purpose of enforcing the decision so made. If the Commission declines or fails to act within sixty (60) days after written request is made, then the questions at issue shall be decided by arbitration in the manner provided in Article Seventeenth of this agreement. The expense of such proceedings shall be borne equally by all parties concerned in the contention.

14. The trains, engines and employes of the Companies owning or using the joint railroad, while upon the said railroad, shall be subject to the regulations and orders of the Superintendent or other Officers of the Company operating the same, and to secure uniformity in time, rules and signals, the said Companies agree to conduct their use of said joint railroad in conformity with the standard time, rules and signals adopted from time to time by said Company operating the line. Said operating Company shall provide for the running over said joint railroad of such trains or engines as the owning and using Companies may desire to run under this agreement and as nearly in accordance with their wishes as may be practicable, and said operating Company shall give equal rights to all trains of the same class. Any employe of the said owning or using Companies below the rank of Train Master shall at any time be removed from service on, or in connection with, the said joint railroad, upon complaint in writing showing sufficient cause therefor addressed to the General Manager by the Company making such complaint; but such removal shall not prevent the employment elsewhere of the individual so removed. It is understood and agreed that in said use of said joint railroad each owning and using Company shall assume all liability for damage to its own trains, engines, cars and property in its charge, employes or other persons and property injured or damages by its trains, engines or cars, and shall protect, indemnify and save harmless the other Companies against any claims or demands in consequence of, or growing out of, such injury or damage. In case of injury or damage caused by the trains, engines or cars of two or more of such owning or using Companies, each of such Companies affected shall assume all liability for damage to its own property, or property in its charge, and to its employes, but liability for damage to other persons and property shall be jointly assumed by the Companies affected in equal proportion. Any loss or damage not above described shall be included in the cost of operation and maintenance of the said joint railroad. Superintendents, managers, agents,

telegraph operators, train despatchers, section foremen, or laborers, watchmen, switchmen or any other person or persons subordinate to the General Manager employed in, or charged with, the maintenance or care of or operation of the said joint railroad shall in respect to the liability of any Company using the said railroad, to each other or to third persons, growing out of the fault or neglect of such officers, agents or employes, be deemed and held to be the sole servants of that Company to, or upon, or in connection with, whose trains, business, traffic or property any loss or damage may have occurred.

Seventeenth.—In case of any difference or dispute arising under this agreement, the parties hereto agree to submit the same, except wherein otherwise specifically provided, to two competent arbitrators, one of whom shall be appointed by the party or parties hereto holding to the one contention, and the other by the party or parties hereto holding to the contrary contention involved in such difference or dispute, and if these arbitrators cannot agree they shall select a third disinterested and competent party, and the three arbitrators, or a majority of them, shall decide with all reasonable despatch the issues before them, and such decision shall be a condition precedent to the enforcement of any right of action under this agreement. In case either of the said parties shall fail to appoint an arbitrator, as aforesaid, for the period of twenty days after written notice given by the other party, or parties, to make such appointment, then, in that event, the arbitrator appointed by the party, or parties, not in default shall appoint an arbitrator of like experience and skill for the defaulting party, and said two arbitrators so appointed shall select a third arbitrator, and the three so chosen, or a majority of them, shall decide such issues. The expenses of such arbitration shall be borne equally by the parties involved in such difference or dispute.

Eighteenth.—It is also further covenanted and agreed by the said Pennsylvania Companies, the Baltimore Companies and the Belt Line Company to do and perform each, every and all the matters and things in the hereinbefore mentioned Ordinance stipulated to be done and performed, and to be subject to all the liabilities, and fully and faithfully comply with all the promises, terms and conditions, matters and things of every nature and kind in said Ordinance contained so far as the same relates to the Pennsylvania Companies, the Baltimore Companies and Belt Line Company, with the same force and effect as if each particular thing named in the said Ordinance was herein fully set forth and covenanted to be done and performed, and the said City of Philadelphia hereby covenants and agrees to fully and faithfully perform each and everything contained in said Ordinance on its part to be done and performed.

In Witness Whereof the parties hereto have caused their respective seals to be hereunto affixed, duly attested the day of A. D. 1913.

Section 3. In addition to the revisions of the lines and grades of streets specifically provided for and necessary for the carrying out of the work covered by said contract, the Department of Public Works, Board of Surveyors, is authorized and directed to make such general revision of the lines and grades of streets as may be necessary to provide for the better service and development of the water front and more direct and convenient approaches thereto, to provide for proper and adequate facilities for circulation and transportation and for commercial, industrial and residential development, and to complete the city plan, within the territory bounded as follows: Beginning at Christian Street and the Delaware River, thence southward along the Delaware River to the boundary line of property of the United States Government, thence westward along the same to the Schuylkill River, thence northward along the various courses of the same to Reed Street, thence following the southern boundary of the completely built-up area of the city to Front Street, thence northwardly along the same to Christian Street and thence eastwardly to the Delaware River and place of beginning.

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south and Twenty-seventh Street; thence curving southwardly to a point in Twenty-sixth Street near Avenue Forty-three south; thence southwardly in Twenty-sixth Street to a point north of Avenue Forty-five south; thence curving eastwardly to a point in Avenue Forty-five south, east of Twenty-sixth Street; thence eastwardly in Avenue Forty-five south to Government Avenue near Twenty-second Street; thence northeastwardly in Government Avenue to a point where the said avenue is intercepted by Sixteenth Street extended; thence eastwardly in Government Avenue to a point at or near Fifth Street; thence northwardly on Fifth Street to a point at or near Johnson Street; thence curving eastwardly on Johnson Street, crossing the tracks of the Pennsylvania Railroad Company, to a point on Delaware Avenue; thence northwardly on Delaware Avenue and east of the right of way of the Pennsylvania Railroad Company to a point at or near the intersection of Delaware Avenue, Porter Street and Commercial Avenue; thence northwestwardly along Commercial Avenue parallel with and east of the right of way of the Pennsylvania Railroad Company and the Schuylkill River East Side Railroad Company to a point at or near the intersection of Commercial Avenue, Moore Street and Meadow Street; thence northwardly in and along Meadow Street east of and parallel with the right of way of the Schuylkill River East Side Railroad Company to a point at or near the intersection of Meadow Street and Tasker Street; thence curving westwardly and northwardly to a point in Front Street, north of Tasker Street, crossing the tracks of the Schuylkill River East Side Railroad in Meadow Street and the tracks of the Pennsylvania Railroad in Swanson Street; thence northwardly along Front Street to a point at or near Queen Street; thence curving eastwardly into and along Queen Street to a point in Delaware Avenue north of Queen Street, crossing the Swanson Street Branch of the Philadelphia, Wilmington and Baltimore Railroad and the tracks of the Pennsylvania Railroad," and inserting in lieu thereof the following: "Commencing with a double track on Schuylkill Avenue, as revised, at or near Twenty-ninth Street (from which point it may connect with the tracks through the property of the Girard Point Storage Company), and thence extending westwardly and northwardly along Schuylkill Avenue, as revised, to a point north of Magazine Lane, thence curving to the eastward and southward, connecting with and crossing the joint four-track railroad of the Pennsylvania Railroad Company and the Baltimore and Ohio Railroad Company at or near Magazine Lane, thence continuing southward and eastward parallel with and immediately adjacent to the said joint four-track railroad to Hoyt Street and Delaware Avenue, thence crossing the said joint four-track railroad and continuing northward parallel with, upon the east side of, and immediately adjacent to the same in the bed of Delaware Avenue, to a point north of Queen Street"; also by striking from Section 1 thereof the following paragraphs:

"The route of the branch from point marked G on the main line to point marked H shall be as follows:—

"Commencing at a point on the main line of road on Government Avenue near and west of Fifth Street; thence extending eastwardly along Government Avenue and Avenue Forty-three south to the river bank at or near Third Street; thence along the river bank to a point at or near Spangler Street.

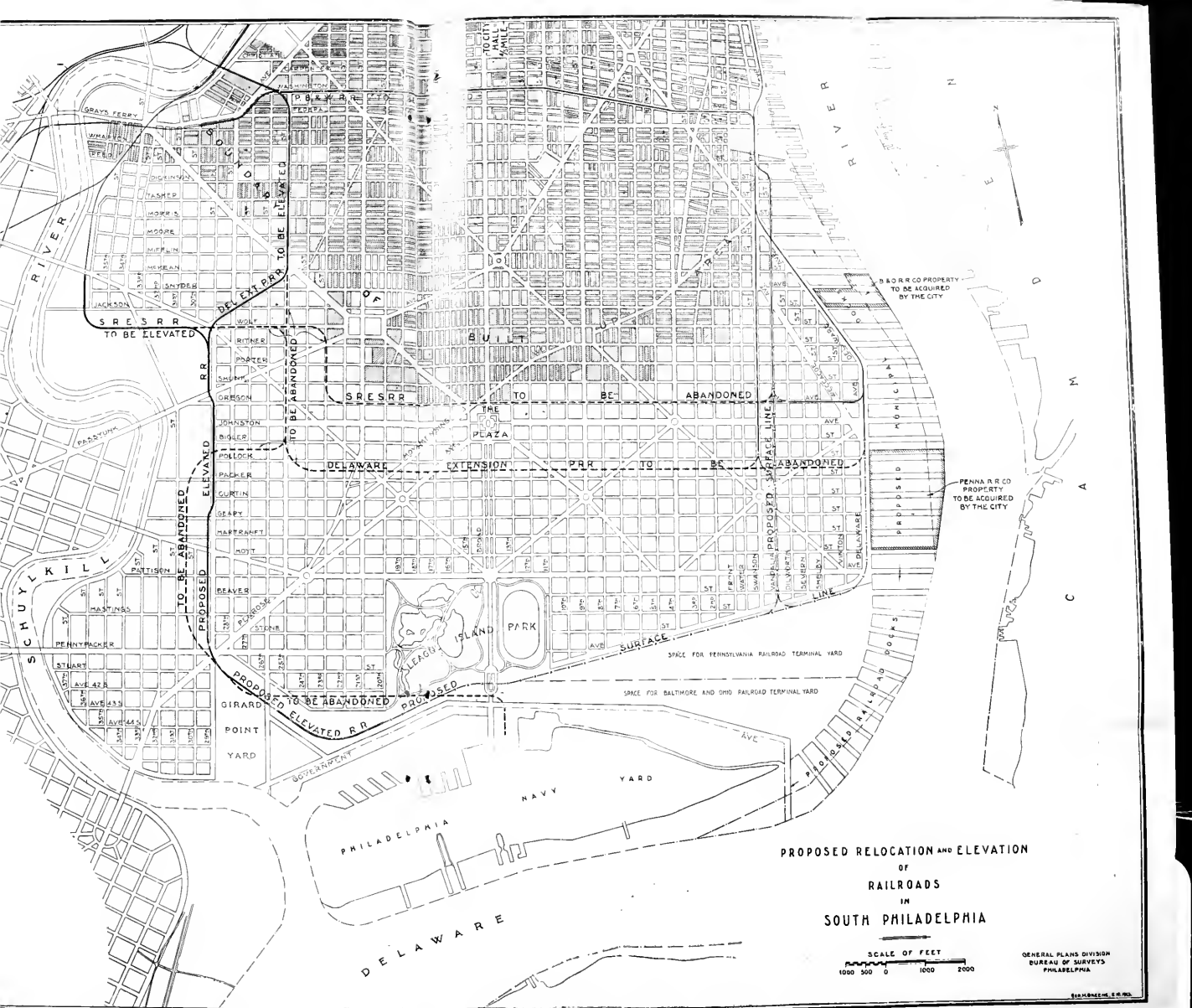
"The route of the branch from point marked I on the main line to point marked K shall be as follows:—

"Commencing at a point in Schuylkill Avenue at or near Hoyt Street; thence southwardly in Schuylkill Avenue to or near Avenue Thirty-six south; thence curving westward to the river bank; thence following the general line of the river bank along the Schuylkill River to a point near the prolongation southward of Thirtieth Street; thence curving northward to a connection with the tracks of the Girard Point Extension Railroad at or near Avenue Forty-five south."

Section 5. That the sum of One Million (1,000,000) Dollars, provided for the removal of grade crossings in the southern section of the City by Ordinance approved the ninth day of February, 1907, be expended for carrying on the work herein provided for.

Section 6. All Ordinances or parts of Ordinances inconsistent herewith are hereby repealed.







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